"Forecasting Needs For In- Service Education Of Primary School Teachers"
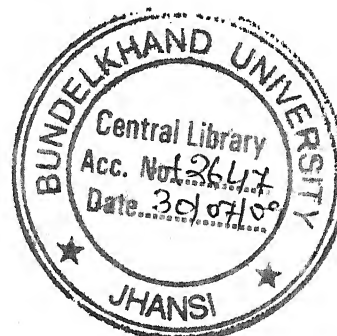
THESIS
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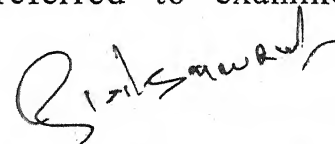
CERTIFICATE

This is to certify that Shri Arun *Kumar* Kaushik, Lecturer Department of Education, Rawatpura College, Datia (M.P.) has Completed the thesis entitled **"FORECASTING NEEDS FOR IN-SERVICE EDUCATION OF PRIMARY SCHOOL TEACHERS"** under my supervision. He has satisfied the condition of attendance as provided in Ordinance No.11 of Bundelkhand University Act.

The subject on which the Ph.D. thesis has been prepared is his original work. The thesis is upto the standard both in respect of contents and language. The work is complete in all respects and may be referred to examiners.

(Dr. R.N. Sharma)
Research Supervisor

DECLARATION

I hereby declare that the thesis entitled "FORECASTING NEEDS FOR IN-SERVICE EDUCATION OF PRIMARY SCHOOL TEACHERS is my original research work. To the best of my knowledge, no other candidate has made a study on this topic in India or abroad.

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PREFACE

The competency has become an indispensable quality for educational growth of a country. it has a great importance for developing society like India. It is a matter of great importance for competency, a educational matter and development in new technology. Competency is an important quality in Indian society and is capable of playing a more dynamic role in the development of primary education in pattern. There is a vast scope for competency expansion of primary education in a number of areas. The main object of the present research work is to find out the areas in which the competency can develop their privacy in education.

The present study has been divided into 6 Chapters. Chapter 1 deals with the concept, importance, need and advantages and disadvantages of competency. Chapter ll deals with Review of related literature. Chapter lll has been provided different areas like shapes understanding, patterns, measurement data handling and tables. Chapter IV deals Analysis and Interpretation : to display different tables. The Table show teacher competencies and training needs of teachers. Chapter V displays curriculum framework introduction and to co-relate present in future in-service education curriculum frame work for untrained teachers. In chapter VI

which may be very useful for the educationist, thinker scholars and all others associated with competency for improving and motivate primary. school students and to centralize competency.

ACKNOWLEDGEMENT

LIST OF ABBREVIATIONS

ACP	Audio Cassette Player
U.P.	Uttar Pradesh
APELD	Asian Programmes of Educational Innovations and Development
AV	Audio Visual
B.Ed.	Bachelor of Education
B.E.O.	Block Education Officer
Com	Competent
C.M.	Center meeting
C.T.	Certificate Training
DAV	Dayananda Anglo Vedic
DIET	Dist Institute of Education & Training
Edu.	Education
EE	Elementary Education
EVS	Environmental Studies
EO	Education Officer
FN	Fairly Needed
FU	Future
Govt.	Government
HOD	Head of Department
IASE	Institute of Advance Study in Education
ISEP	In-service Education Programme
LA	Least Adequate
LE	Least Expectation
LN	Least Needed
MA	Most Adequate
Me	Middle Education
ME	Most Expectation
M.Ed	Master of Education

Mdn	Median
MHRD	Ministry of Human Resource Development
MLL	Minimum level of learning
MOA	Moderate Adequate
MOE	Moderate Expectation
MP	Madhya Pradesh
M.Phil	Master of Philosophy
MV	Median value
NC	Not Competent
NCERT	National Council of Educational Research and Training
NCTE	National Council of Teacher Education
ND	New Delhi
NE	Non-formal Education
NGO	Non Government Organisation
NO	Number
NT	Non-formal Training
NPE	National policy of Education
OHP	Over Head Project
PG	Post Graduate
Ph.D.	Doctor of Philosophy
PMOST	Programme of Massive Orientation of School Teacher
POA	Programme of Action
Pre	Present
PRT	Primary Teacher
PSE	Pre-Service Education
QD	Quartile Deviation
RCE	Regional College of Education
RIE`	Regional Institute of Educations
SCERT	State Council of Educational Research and Training
SLM	Self Learning Materials

SIE	State Institute of Education
SIP	School Improvement Planning
SOPT	Special Orientation Programme for Teachers
SRG	State Resource Groups
S.No.	Serial Number
T	Trained
TE	Teacher Education
TT	Time Table
TV	Television
UGC	University Grants Commission
UNESCO	United Nations Educational Scientific Cultural Organisation
UP	Upper Primary
UPE	Universalisation of Primary Education
VCR	Video Cassette Recorder
VCP	Video Cassette Player
VEC	Village Education Committee
VMN	Very Much Needed
UC	Un Certain
UT	Un Trained
%	Percentage

CHAPTER-III

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CHAPTER-V

TABLES

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Chapter- 1

<u>Introduction</u>

INTRODUCTION

Education is a dynamic factor of change for a better future. In the modern age it is not possible to develop our professional qualities unless we update our skill and competencies. Teaching profession plays a major role in educational and social development of any country. The uniqueness of this profession is identified with production of right type of citizenship in all walks of life. It also enriches the social and political cultural standards of life there by bringing about qualitative improvement in national sphere.

Education of any country is always influenced by its culture traditions. The geographical situation, character-traits and historical traditions of India have greatly influenced its education.[1]

The need for effective forms of education needs the use of large verity of media in education; since scholar observe the day-to-day events of the world on TV and different networks. Present day teacher get most facilities to use new techniques there by making classroom teaching more effective. It can be confidently stated that the future teachers will have to be exposed more and more to new technologies of teaching. Ample opportunities must be provided for continuous growth of professional qualities among teachers.

In-service education prepares teachers to face different challenges and take the adventures in changes. It develops the ability to think and apply new ideas constantly and creatively. It helps to search for alternative ways achieving objectives of better education. Different

startegies of advanced educational technologies are adopted for this purpose. Keeping in view changes in education as well as other system of society it is high time for strengthening the base of in-service education of teachers. It is essential to adopt in-service education programme to change the professional rejuvenation of teachers for present and as well as for future society.

There are two aspects of teachers preparation. The teacher before he / she joins the school and attends training programme of theory and practice teaching in training colleges, leading to a degree or certificate or diploma. This is known as pre-service teacher education. The teacher also attends training programme during his service period to develop his professional and personal growth, to become acquents with new technolies such programme is known as in-service teachers education. In-service education brings new insight; growth, understanding and cooperative practices to the teachers professional and arouses them to improve themselves in all walks of life. Agencies plan and organize different activities to help the teachers to improve quality of teaching and education .

Meaning of term in-service education is self-explanatory. It refers to the education a teacher receives when he enters the teaching profession after he had his education / training in a schools, refresher courses etc. that he receives at different institutions. The programme can be of different kind viz full time part time, evening, vocation continuing etc. It can be organized through face to face situations, as

well as through distance education (DE) situation. Different kind of training institute higher education institutions and agencies organize such programme. The programme can be sponsored type as well as trainees voluntary type.

In-service education means contribution towards growth of teachers in the capability to teach. It means a method broadening understanding of human growth .There have been views that in-service education has to be implemented in systemic programme on and when the teachers may feel the desire and necessity for self-improvement. Some of the definititions of in-service education are as follows:

' The in-service training for teacher should be flexible in organization, informal in manner and relaxed in tone" (Brown Kedres and Scham, 1971).

' In-service education / training should encourage teachers to recollect in tranquility' the thoughts on their teaching so as to develop the self assessment skills considered as essential for practitioner" *(Sochan 1983).*

'Experience alone is insufficient for professional growth, but experience plus reflection provides he powerful impetus for teacher development. The main advantages of the reflective training are in the form of attitudinal changes, professional growth and improvement of classroom teaching " *(Richard).*

The above definition reflect that in-service education is understood as updating teachers familiarity with current approaches of

improving classroom teaching and making in-service training a meaningful activity for them. However in a broader term in-service teachers to improve teachers competencies and there by improving professional qualities.

1.1 IMPORTANCE OF IN-SERVICE TEACHER EDUCATION

Teachers occupy a place of paramount importance in any system of education. The teachers largely influence the character and efficiency of our pupils on whom, depends the great responsibility of reconstructing the future of the nation. Teachers must think of changing their views according to the developments and innovations. Thus in-service education fulfils the thirst of gaining knowledge.

In-service teacher education refreshes the knowledge, refreshes his experiences develops a wider outlook, enhances the zeal, increases the efficiency, acquires the new information, contemplates upon new problems develops familiarity with materials and methods and knows the innovative ideas in this system of education. It strengthens intellectual power and awarness. The teachers must retain zest and ardour instead of following routine school keeping business devoid of all he inspiration and purpose in life.

It develops the communication skills, provides an opportunity to enlarge and improve teacher's educational capacities in all the fields of their works, to raise the cultural and professional standards and teaching force as a complete to strengthen the innovative vogor and capacity. It should make teachers ready and able to understand and face criticality

of situations in time. The teachers must know their scholar, to use different techniques of managing their teachings as well as to prepare student for the new economic, social cultural, challenges.

In all in-service education must be a regular methods in teaching learning activities and through out teachers profession. Every teacher should realize such value i.e. duty consciousness, time sense, sincerity in academic activities, accountability towards society etc A Teacher should perform his noble profession through out his life by inculcating the values. He must treat himself as a scholar and not as a master. In this sense teachers education never ends. In-service education system contributes a lot towards continuing and life long initiative for learning and development of teachers.

1.2 IN-SERVICE EDUCATION HIGHLIGHTED IN I NTERNATIONAL FORUMS

As stated above in-service education is an integral part of the teachers professional development. The professional organization, teachers association, and forums must support to maintain the quality of education. In many countries growing. The in-service training has been thought the key to the renovation of the teaching resources of education system and its growth and developments has stimulated moral, innovative and initiatives than the pre-service programm. The major aims which have impelled the in-service teacher education as stated by UNESCO (1986) are : -

(a) Uplift academic qualifications of teachers.

(b) Provide adequate professional training so that teaching and learning are made more effective.

(c) Keep the teachers abreast of new growth in particular subject areas as well as in pedagogy

(d) Impart to teachers, the knowledge talent and attitudes which are compulsory in the light of changing nation development mission and educational priorities.

(e) Make teachers more aware of the problems of their communities and to develop the skill and attitudes needed for them to act as changing agents in the community.

1.3 NEED FOR TRAINING ACTIVITIES IN IN-SERVICE EDUCATION AS HILIGHTED BY UNESCO (1987) READS AS :

I- Training for the development of the capability to disseminate new techniques of investigation.

II- Training for development of knowledge and telents need to apply the new procedure of teaching,

III- Training in skills and practice in the use of technology or use of multimedia approach to teaching.

IV- Training in shifting from an academic information dissemination method to a learning organizer and helper more.

On the basis of various reports of (UNESCO) it can be highlighted that in-service education should be of continuing nature which provides

incentives to the teachers, upgrades their abilities and skills, brings awareness about educational the community and also the uses of multimedia packages to teaching. All these should be incorporated in their professional development through different kinds of in-service teacher education programme..

1.4 INTERNATIONAL SCRIPT

A review of progress of in-service teacher education from UNESCO (1987) document exposes that the area of in- service education is very much encouraging as a part of common policies of teacher education in Asia and the pacific countries. The summary of such development is presented in the contest of primary teachers. The presentation focuses on issues, needs and future plans of action for in-service teacher education at primary school stage.

The countries like Australia, China Philippines respectively had concentrated on the in-service activities to be continued throughout academic years as well as needs of life long learning concept for in-service teachers. They had planned to execute through different agencies of education, involving co-operation between schools and cultural political social and moral organizations and obtain the wider participation in in-service programme for primary school teachers. Further they had stressed on reorganization land retraining of the existing in-service teacher and to find out the ways which are more responsive to social, individual and professional.

In the case of Indonesia, Japan and Korea the focus was on significant improvement of professional education through workshops, seminars and different approaches. They helped on teachers to develop competence, skills, and values with the help of working facilities while moving towards the 21st century.

The countries like-Malaysia, Maldives, New Zealand and Pakistan had stressed on need for systematic planning implementation and evaluation of staff development programme. They had stressed on availability of resources of the institution to conduct the programme for more effective learning and to develop the positive attitudes in changing behaviour and innovations in the classroom. These countries emphasized on intensification of innovative approach to in-service teacher education. They had approached towards making it compulsory to undergo in-service course during the five years of service.

In the case of countries like Papua, New Guinea, Sri Lanka Thailand, and Western Samoa quality improvement programme were needed in in-service teacher education. It had been forced that wherever and whenever possible teachers should be allowed to take initiating roles in organizing them to suit their own needs. Research units had been created to arrange the innovative Programme and to provide more facilities in programme in in-service teacher education. Moreover stress was given on preparation of alternative packages in different programme, and to provide national service development plan for futures.

In the context of in-service education of teachers Delors Commission (1996) report highlighted on.

1.5 DEVELOPMENT OF TEACHER EDUCATION IN INDIA

In ancient medieval India there was no concept of teacher education. Scholarship was considered as the sole criterion for becoming a teacher. The concept that teachers are born and not made was also prevalent. It is only during British period, we see advent of teacher education in the modern history of education in India. Institutions for the training of teachers were first started by Danish missionaries. A Central school for the education of teachers was set up in Madras in 1826 Normal School were in Poona, Bombay, Agra, Meerut and Banaras between 1830 and 1857. The woods' dispatch (1854) emphasized the training of teachers and desired to see the establishment of training schools and classes for masters in each presidency of India. During 1882 there were 106 primary teachers training schools and two Secondary teachers training institutions in the whole country. The Hunter Commission, 1882 recommended for starting of more training schools and introduction of examination in theory and practice for Secondary Schools teachers, Separate training Courses in graduate and under-graduate teachers were to be introduced 19th century, there were 6 training colleges and 56 training schools for secondary teachers in the country. Practicing schools come to be attached to training colleges after Government of India Resolution of 1914.

The Calcutta university commission, 1917 laid stress on:

a-   Increase in Number of trained teachers

b-   Systematic research work on padagogical subjects.

c-   Creation of department of education in the universities

For the first time, Hartog Committee, 1929 Recommended for organizing refresher and in-service training for trained teachers. After independence many kind of teacher educational programme have been started through out the country. Basic training received great fill up. The BT course, M.Ed and Ph.D course were started in many universities.

The University Education Commission recommended that our school teachers learn all of whatever subject they teach before reaching the age of 24 or 25 years and then all their further education is left to experiences, which in most cases is another name for Stagnation. We must realize that experience needs to be supplemented by experiment before reaching its fullness and that teacher, to keep alive and fresh should become a learner from time to time. Constant out powering needs constant in taking practice must be reinforced by theory and the old must be constantly tested by the new.

1.6 SECONDARY EDUCATION COMMISSION (1952-53)

The secondary Education Commission highlighted on ' however, excellent the programme of teacher training may be, it does not by itself produce an excellent teacher. It can only engender the knowledge, skills and attitudes which will help teacher. It can only engender the knowledge, skills and attitude which will help teacher to begin his talk,

with a reasonable degree of confidence and with the minimum about of experience. Increased efficiency will come through experience critically analysed and through individual and group effort for improvement. The teacher training institution should accept the responsibility for assessing in this in-service stage of tea cher training " Among the activities which the training college should provide or in which it should collaborate are :

(a)   Refresher courses.

(b)   Sort intensive courses in special subject.

(c)   Seminar and professional conferences.

(d)   Seminar and professional conferences.

(e)   Renowned educationist lecture.

(f)   Education motivation programme

It should allow its staff where possible to share as consultants to a school or group of schools conducting some programme of improvement.

1.7 THE EDUCATION COMMISSION (1964-66)

The education commission gave prime importance to in-service education. It stressed that in all professions. There is a need to provide further training and professional preparation. The need is most urgent in the teaching profession because of the rapid advanced in all fields of knowledge and continuing education of pedagogical theory and practice. The programme will have to develop, through a number of agencies. The first is the school itself which must provide opportunities to the

new teacher to learn from his experience and through consultation and discussion with experienced teachers in the school. The head and the senior teachers have a special role to play in providing guidance to the new teacher through his work and organising suitable activities, such as staff study circles, and discussion group, education departments training colleges and teacher organisation can also play significant role in this programme.

Apart from what the school and other agencies can do is need for the organization of large scale, systematic and co-ordinated programme of in-service education, so that every teacher would be able to receive at least two or three months of in-service education in every five years of service. The curriculum of these programme should be planned and organized systematically, materials being developed with great care and the staff in charge being properly oriented. Good text book and sources books audio visual materials and children work should be exhibited. This can be done only over a period of 10-15 years. Every training institution, pre-primary, primary, secondary is staffed and equipped to face up extension work institutes an advisory service for teacher and organize in-service training programmes, such as-

a- refresher courses
b- seminars
c- workshops
d- summer institutes
e- open discussion
f- debate of deferent topic and subject

Every training institution work on 12-month basis with proportionate provisions for additional staff and facilities. In addition, institution that will carry out in-service work on a whole time and continuing basis should be established.

1.8 NATIONAL COMMISSION ON TEACHER (1983)

The National Commission on teachers chaired by D.P. Chattopadhaya 1983 emphasized on quality of teacher education programme. For this content the in-service education teachers for teachers for clearning the backlog was emphasised. The approach to recruit untrained first class graduates / post graduates and then give the job training to be followed by full training through correspondence and contact programme, could also be tried out. There is to be no objection to correspondence-cumcontact courses for B.Ed training but this should be allowed only if satisfactory arrangements exists for practice and prepare supervision."

Regarding teacher educators the Commission highlighted the following -:

" The teacher educators in colleges of education should be drawn both from discipline of various school subjects and education disciplines like-psychology, sociology, philosophy etc. The minimum qualifications for a teacher educator should be a post graduate degree in the subject and B.Ed. preferably or M.Ed.degree. The need for their continuous in-service education must also be recognised, so that colleges of education can from part of the main stream of academic life of their respective universities."

The Commission noted that " some times that least effective District inspectors of school are transferred to the Teacher Training Institute. The practice must stop forth with. If necessary, separate cader for those in teacher training, in-service education and research should be framed to ensure qualitative improvement in primary teacher preparation."

1.9 NATIONAL EDUCATION POLICY (1986) ON IN-SERVICE TEACHER EDUCATION

The National Education Policy (NEP) placed complete trust in the teaching community. It calls for a substantial improvement in the conditions of work and the quality of teacher's education. The policy also emphasizes the teacher's accountability to the pupils, their parents, and the community and to their own profession.

The strategy of implementation of NEP in regard to teacher education will consist of variety of measures for improvement in the starts of teachers along with effective teacher accountability and a substantial upgradation in the quality of teacher education.

In specific terms, the main aspects of the strategy of implementation would be the following :

I-   Introduction of reforms in the system of selection of teachers.

II-   Improvement in the living and workings service conditions of teachers

III- Creation of effective machinery for removal of grievances.

IV-   Involvement of teachers in the planning and management of education.

V-   Involvement of teachers associations in upholding the dignity of teachers their professional integrity and curbing professional misconduct.

VI-   Willingness to take hard decisions with regards to the observance of (e) and (f) above.

VII- creation of opportunities and atmosphere to promise autonomy and innovation among teachers.

Operation list on this strategy will call for strong determination, meticlas planning innovative and participatory method of programme implementation and considerable amount of financial resources.

Teacher education is a continuous process and its preserve and in-service components are inseparable as the first stept, the system of teacher education must be overhauled.

It was further highlighted in the NPE programme of action (1992) that a great deal of responsibility would be given to SCERTS. They would have the major role of planning, sponsoring, monitoring, and evaluating the in-service education programme for all level of teacher, instruction and other educational personal. The needs for in-service education of teachers a raised from several sources, such as changing national goals, revision of school curricular additional inputs in teaching learning system, inadequate background of teachers, etc. The state level agency would take cognizance of all the needs before preparing a programme of in-service education for a given age of time.

SCERTS would also prepare suitable materials for in-service education of teachers, undertake orientation of key person, monitoring and evaluation of programme. Similar steps for training of teachers in vocational stream should be taken by SCERTS.

The District Institute of Education and Training (DIET) for the primary level would be a major agency to conduct the programmes of in-service education for primary teachers. Assistance would be sought from schools complex in the district. In case of secondary school teachers, the programmes would be extended through teacher training institutions and the condut of continuing education. The district level education office will help in effective conduct of the programmes.

In-service education programme cannot be associated face to face modality, especially in view of the numbers involved. Distance in-service education will be prepared and extended with the help of broadcasting agencies. SCERTS would be equipped with necessary resources for production of learning materials other than the printed material. Minimum essential equipment to record audio-video programme as DIETs would also be provided production facilities at DIETs and colleges may not be of professional quality which would produce material which can be used in its own training programme and can also be shared by other sister organization. Experience especially those of voluntary organizations should be drawning upon in designing courses, development of materials and strategies for in-service education."

1.10 IN-SERVICE TEACHER EDUCATION IN INDIA

Development of teacher education in India has been disused earlier. The all India council for secondary education was set up in 1955. The council established extension center in teachers colleges. There are many practical problems in the implementation of the scheme. It may be hoped that all will be good on all sides and of all the agencies, the central and state governments managements. The act will help in strengthening the professional education of teachers both pre-service and in-service as a continuous process extending throught the professional career of teachers in this country.

Some of the fuctions of NCTE having on in-service teacher education can be real as -" to make recommendations to the central and state Governments, Universities, University Grant Commission (UGC) and recognised institution in the matter of preparation of suitable plans and programme in the field of teacher education.

a-   To coordinate and monitor teacher education and its development in the country,

b-   To lay down guidelines in respect of minimum qualifications for a person to be employed as a teacher in schools or inrecognised institutions (MHRD)

1.11 FUTURES OF TEACHER EDUCATION IN INDIA

Teacher education contributes towards success of education system as a whole. A bird eye view of Indian teacher education system reflects that it is yet to expand its base to cader to the needs of total

education system in it is There exists a mismatch between the required strength of teachers and posts filled in primary and middle schools' (sahoo, 1996). The summary of 6th all India survey in education reaveals that on an average 3.5 teacher positions exist in each school 28 lakh teachers for 7.4 lakh primary and middle schools There are lakhs of schools with single teacher facility. If we set and ideal of 06 teachers per school at primary / middle stage the existing strength of teachers should be added with around 18.5 lakhs figures without adding new schools' Hence the teacher education institutions ideal target is 100 above the strength of present products' (NCERT).

The teacher training institutions concentrate on preparation of teachers with major focus on pre-service teacher education. Keeping in the view the above positions of the schools, it is very difficult to provide the pre-service teacher education to meet the demands of society for school teachers at primary and middle stage. That is to be emphasized on the above context is that appropriate manpower planning is to be integrated with identification of targets of pre-service and in-service training programme for each stage of schooling at state level. Alternative programme are to be evolved for meeting demands

Expansion of knowledge and technological developments comples for upgradation of experiences of teachers from both subjects as well as pedagogy points of views. Forcast is to be made the needs and demands for in-service teacher education programme of teachers at different stage of streams of schooling. Specific norms are to be set for

organisation of curriculum and concerned in-service activities on continuous basis. That will aim at linking real school problems and experiences. Every teacher education institution (Government and non government aided) will have to add in-service teacher education programme as an essential component of institutional activities.

Development of educational technology especially advanced communication technology have posted challenges for face-to-face system of education and training. The open learning system have opened the new method for use of multimedia based training programme where face-to-face training may be from one of the components of teacher education programme. The existing manpower and physical resources of teacher education institutions can be remodelled with the advanced open learning programme, which will satisfy the multiphase requirements of teacher education.

The teacher education must develop a holistic perspective in the context of broader system of education. Abroad interdisciplinary base is to be developed in the context of open learning society, where teachers, role will be linked with facilities of learning through alternative means and media. Acomparative framework for teacher education is yet to be developed to encompass the futuristic goals of education at state level.

1.12 IN-SERVICE TEACHER EDUCATION PROGRAMME IN (U.P.)

The in-service education in Uttar Pradesh by Regional College

of Education (RCE) Allahabad offering the B.Ed. course with an objective of clearing the back log of untrained teachers. The state council of Education Research and training. (U.P.) Allahabad came in to existence on 5th January 1979 as a result of transformation and up gradation of the former state institute of education and ingraugurated by the union minister for education and cultural on 16th January 1979. The fuctions of the SCERT were notified by government in their Resolution No 16048, Dt. Ist may 1979.

The Department of State Educational and Research Training (DSERT) provides ample opportunity of in-service education for school teachers in (U.P.) with the aims of :

I- Developing the curriculum, instructional materials methods of teaching , techniques of evaluation, teaching aids, Kits and equipments, learning resources etc.

II- Conducting in-service training cources and orientation programme in different vocational cources.

The programme of Action (POA) of NPE (1986) envisaged that pre-service and in-service secondary teacher education would be recognised and strengthened. .

According to implementation of NPE the scheme of teacher education (CTE) has been in operation in Uttar Pradesh.

According to implementation of NPE the scheme of college of teacher education (CTE) has been in operation in (U.P.) The scheme is expected to perform following broad fuctions :

a-   To prepare teachers through pre-service training programme for secondary school teachers

b-   To keep secondary school teachers' abreast of the development in subjects disciplines and methodology of training.

c-   To extent general resources support to the secondary schools and their teachers.

d-   To carry out innovations and extension work in the field of secondary education.

College of teacher education should have responsibility as an integral part of their work without offering their contribution to the pre-service teacher education (MHRD),1987).

Education, (IASE), Regional college of education voluntary organizations like, Sikhya Vikash Samiti, (U.P.) , Ramakrishna Institute of Spritual and moral Education, (U.P.) state, Council of Educational Research and training and different professional organizations of teachers should organize various kinds of in-service education programme for primary school teacher and concerned teacher educators. These programme can bring improvement in the standards of teacher education if they are whole-heartedly implemented. We can hope that the institution like-National Council of Educational Research and Training, U.P. National Council of Teacher Education (NCTE) would make serious effects to expend the base of in-service reacher education for primary school teachers in the state.

The in-service education programme has been implemented with bold step in the right direction to improve the quality of education. Its importance has been recognised by one and all its potential to contribute effectively towards educational reconstruction has been acknowledged beyond doubt by administrators and educationists alike.

The in-service education programme has been implemented with bold stept in the right direction.

Moreover to national council of education research and training (NCERT) was started in 1961; with one of the major aims of in-service training. Its purpose is to strengthen in-service Teacher Education (ISTE) programme. Regional Institute of education (RIE) were created for this purpose.

The NCERT organises pre-service and in-service education for teachers' i.e. primary, secondary and teacher educators. It has organise a number of in-service programme intending to improve the teaching standard and to maintain the quality education.

The National Council of Teacher Education (NCTE)has been in existence since 1993. The head quarters of NCTE is located at Delhi. There are four new regional offices set up in 1995 namely: Bhubaneswar, Bhopal, Maysore and Jaipur Admitting that some of the programmes of action (POA) started that the NCTE would be conferred autonomous and statutoey status to remedy the present situation. The NCTE was created in the pursuance of the policy and parliament enacted legislation 1993 (Act n0 73 of 1993) The act received the assent of the present of

India on the 29th December 1993 and was published in the Gazettes of India. Extraordinary, part II date 30th December 1993. NCTE plays a major role in setting norms and guidelines for various kinds of teacher education institutions offering pre-service and in-service education through face-to-face and distance mode.

The National council of teacher education (NCTE) has related te teacher conpetency to create motivating manner of teacher. NCTE is very renowned educational institution of our country. The NCTE has organized different functional activities to corelate new culture custom tradition, and practice.

NCTE, UNESCO have established New Educational programme and educational approaches to centralize educational aspect.

Concerns are expressed towards providing teachers in-service education programme to improve themselves academically and professionally. Hence United Nations for Educational Scientific cultural Organization (UNESCO) and its Asian programme for educational innovations and development (APEID) highlighted the signature of in-service education of teachers..

It emphasized on 'the requirement for rapid training of a large number of teachers has given serious consideration to the delivery of a minimum package of competencies, again at mastery level. Thus c,lose and functional interrelationship between pre-service and in-service continuing education would be established, which together will contribute to the gradual enhancement of teacher quality''.

(UNESCO,1979). It was further stated that in-service teacher education (ISTE) aims " to improve the quality of teachers through revision and modification of in-service and pre-service education, provision of incentives to teachers to promote their professional growth, training teachers to mobilize community resources and production of low cost audio visual aids" (UNESCO,1979).

One can understand from UNESCO documents that in in-service the study circles are informally linked with teachers training institutions and with professional organizations. The members of various study circles get together in various meetings and conferences. A teacher may continuously upgrade his abilities and skills through actual teaching by attending the training courses and by becoming a member of independent study circles in his specialized subject area.

Improve the quality of education. Its importance has been recognised by one and all its potential to contribute effectively towards educational reconstruction has been acknowledged beyond doubt by administrators and educationists alike. In service teacher education where individually oriented or group initiated is a process of working towards change, viewed in terms of humane behaviors. Changes are ordinarily identified as gaining new knowledge, increasing understanding acquiring more desirable attitudes and strengthening interests. Viewed in terms of materials media and knowledge etc. such changes may suggest exploration, evaluation, modification, amplification, and elimination of molded practices-of these selectes process, also imply

personal involvement, both contribute to behavioural changes and lead to changes in the organization of teaching practices.

The quality of primary education depends upon the fact that how much a primary teacher is compact in teaching and what type of training he needs to improve the quality of teaching of these terms are explained one by one in the following discussion.

1.13 TEACHER'S COMPETNCIES

Competency is a term used extensively and hence is defined in different ways, teachers education and the job performance of a teacher is one of the contex tin which the term is used. Several researchers have attempted to define this terms.

Houstan (1987)

State that" competencies are the requirements of the competency based teacher education, which includes the knowledge, skill and values the student must demonstrate for successful completion of the programme." Similar views were expressed with respect to the meaning of a competency by Mc Numara (1992) and APEIED, UNESCO (1980)."

According to DPEP, Tamilnadu (1986) Teacher competency refers to " the right way of conveying units of knowledge application and skills of students." The right way here, includes knowledge of content, in an interesting way, involving the activities of students.

Hall and Jones (1976) had viewed competencies as less abstract than goals and objectives as more specific then a competency. Teacher

competency have there supper ordinate and subordinate relationship as shown further.

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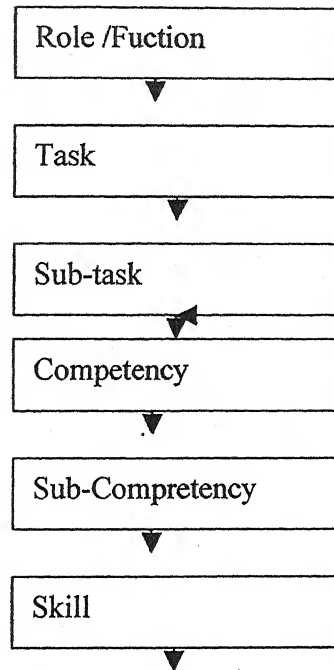
The said analysis is pre-dominatedly behaviouristics. It may not be wrong to say that this idea of competency and its development is based on the behaviourrstics approach. However, the other schools of thoughts such as Humanism have been considered, through in a tatent manner. This is because the behaviouristic thinking is well founded in the policy and teacher training practices.

1.14 CHARACTERISTICS OF COMPETENCY

A study of meaning attributed to term competency or meaning with which it has been used in literatures pertaining to teacher education reveals that certain common characteristics are applicable to a competency. These characteristics are :

I- Acompetency consists of one or more skills, whose mastery would influence the attainment of the competency.

II- Acompetency has its linkage with all the three domains under which performance can be assessed. It spans the domains of knowledge skills and attitude. Even through the skilled performance of a teacher is closely associated with his competence, such as performance would be knowledge and experience based and favourable attitude

III- Because the competencies are observable, they are also measurable. It is possible to assess a competency from the performance of a teacher.

It is not necessary that all competencies of a teacher have the same extent of knowledge than to skill and attitude. Some have referred to such competencies where as there may be competencies which are skill/ performance leaded .In this work, competencies which have a predominant part of skills have been considered. A reason being that such competencies are not devoid of knowledge and attitudinal dimensions and that they are more closely linked to the performance assessment of a teacher or to his job analysis. Competency : types and categories :

1.15 COMPETENCY : TYPE AND CATEGORIES :

In an article titled " Competency Based teacher Training Programme" published by DPEPm Tamilnadu (1996), competencies of a teacher have been classified as under-

a-   Classroom competencies

b-   Competencies related to administration and management

c-   Competencies in related to school, society, co-workers and pupils,

d-   Competencies in relation to content and curriculum

e-   Motivational and value based competencies.

Futher, DPEP, Tamilnadu (1996), states five types category of competencies as-

a-   Cognitive based competencies

b-   Performance based competencies

c-   Consequence based competencies

d-   Affective competencies and

d-   Exploratory competencies.

NCTE in its document ' Competency Based and Commitment Oriented Teacher Education for quality School Education' (1998) lists ten competency categories. They are-

a-   Contextual competencies,

b-   Conceptual competencies

c-   Content competencies

d-   Transactional competencies

e-   Competencies related to other educational activities,

f-   Competencies to develop teaching learning materials,

g-   Evaluation competencies,

h-   Management competencies,

i-   Competencies related to working with parents, and

j-   Competencies related to working with community and other agencies.

a-   Preparation for Instruction,

b-   Development, preparation and utilisation of instructional materials,

c-   Motivation of children,

d-   Communication in classroom,

e-   Methods of instruction,

f-   Evaluation of learning,

g-   Diagnosis and remediation,

h-   Classroom management,

i-   Co-curricular activities,

j-   Community participation,

k-   Special Education, and

l-   Institutional planning.

The above and other related efforts towards identification and categorization of teacher competency reveals that there are several ways in which competencies can be classified. However, keeping in view comprehensiveness, appropriateness and relevance of such categorizations the researcher has reffered Bhat's (1998) classification as the basis of this investigation.

a-   Evaluation of learning

b-   Diagnosis and remediation

c-   Classroom management

d- Co-curricular activities

e- Community participation

f- Special education and

g- Institutional planning

1.16. RATIONAL OF THE STUDY

It is general phenomenon that education opportunities have been Expanding very fast through different agencies of education because of fast growth of literacy and primary schooling in U.P. They have been heavy pressure expansion of Primary Education Institutions. This has also demanded employment of large number of teachers and currently the 6016 in primary school in four backward districts of U.P. Teacher Education is very much essential with a view of maintaining the quality of schooling. Rather it would be continuous process and must keep pace with futuristic developments in the field of knowledge and education. This has been the care of modern education system that training should be need based content specific and relevant to the ground reality of schoolings. The quality as well as quantity point of view training provision for in-service teachers should match the demands of present and future.

As highlighted in National policy of Education (NPE) 1986 in-service education is to be treated as an integrated part of school system. There has been thorough efforts of orientation programme like programme of mass Orientation of school teachers (PMOST) and refresher courses in subject areas in view of meeting quality demand

for training. It is essential to forcaste it on the basis of specific education and it must be on the present futuristic needs, as perceived by stakeholder like-teachers, Headmaster, Headmistresses and teacher educators in U.P. There has been gradual expansion in the strength of teacher over past decades in near future this number is to be expand very fast with a view to make appropriate planning for in-service teacher education.

Forecasting the teacher strength for coming decade is very essential. As stated by National Commission on teachers (1983) " Programme should be planned thoroughly well ahead of time. We tend to be careless and slips had in whatever we do...................every detail should be attended so that teacher come well prepared with the proper mind-set to benefit by the course, sought or long."

As stated above explorationof present and futuristic needs for in-service teacher education will from the basis of training various curricular programme for in-service teachers of futures. " In the first place the needs of teachers have to be identified at institutional and other levels and such in-service education arranged as will directly meet those needs. They may have ....identification of teachers needs and meeting them directly as of the first importance" (National Commission on Teacher, 1983). Hence it is very essential to conduct explorative studies as well as normative studies on futuristic needs of teachers education curriculum must have its roots in the experiences of participants. The participants expectations and suggestions regarding

different component of curriculum will help the planners of teacher educators to search for alternative resources like learning materials, media, resource persons evaluation mechanism, physical, facilities, financial support etc since planning of teacher education is done at state level conducting explorative studies on curricular input and corresponding resource potential will be essential.

As it is witness in the tribal belt of U.P. a huge number of primary school teachers were not possessing training qualifications prior to recruitment. There is a major challenge to meet the requirement of preparatory training for untrained in-service teachers. However because of their teaching experiences their training needs may be different from that of fresh trainees. There may also exist differences in training needs of trained in-service teachers and untrained in-service teachers. Identifying such training needs with futuristic direction will be of immense value for fixing priorities of in-service education of school teachers.

The present experiences of functioning of in-service teacher education must guide the futures programmes as stated in the earlier section. The DIET of Koraput district has been organizing various kind of subject oriented courses and shorter theme pacific programme for primary school teachers since 1988-89. Assessing different components of such programmes on the basis reactions of the participants will help the teacher education to identify the merits and limitations of existing will help the teacher education to identify the merits and limitations of

existing programme. Such experience from the basis for planning futures programme and rectify the limitations through appropriate measures. Thus it becomes essential to study the reactions of participants of in-service teacher education programme like primary school teachers.

As stated earlier the future curriculum outline must emerge from expected competencies lacking among teachers needs and aspiration of participants their demands for training the perception of different componets training, available resources and opportunities various organizations of teachers educations at state level. With a view to guide teacher educators and planners of teacher education programme it is very much essential to come out with futuristic guidelines of various programme of in-service Teacher Education while linking if education programme it is very much essential to come out with futuristic guidelines of various programme of in-service teacher education while linking if with competencies based needs for teacher education among in-service teachers.

Review of studies conducted in the areas in -service education in India inducate that so far limited efforts have been made to highlight these issues especially in the context of in-service education of primary school teachers. Review of studies conducted in the areas of in-service education in India indicate that so far limited efforts have been made to highlight these issuses especially in the context of in-service education of primary school teachers. There have been few studies conducted in in-service education like *Srivastava* (1966) *Mama* (1980) *Sharma*

(1982) *Butala* (1987). the studies of *Srivastava* (1966) and Sharma (1982) *Butala* (1987) have focused on growth and development of teacher education and discovered a declining trend of in-service education programme *Srivastava* (1966) and *Sharma* (1982) have focused on various means for strengthening teacher education courses. The following factors contributed to a great extent to strengthen the in-service programmer like quality of DIETsstaff, quality of extension staff, and practiced utility of the programme. *Butala* (1987) indicated that the programme of in-service education were planned through the advisory committees. Resource persons had experiences of in-servicve education programme in school subjects. Mohanty et al (1976) *Mama* (1980) *Sahoo* and (1985) foused that multimedia packages were more helpful for teachers to their to their efficiency of profession. *Khan* (1999) stated that media have a large potential of distance education modes. *Mama* (1980) *Sharma* (1982) *Sahoo* (1985) *Butala* (1987) stated that no efforts were made to involve teachers in planning evalution and follow up of in-service education programme . State Institute of Education Gujrat (1965, 1966) stated that the trances had some financial problems and there was no proper planning in the provision of facilities for the teachers training. SIET, *Rajasthan* (1966) focused on an investigation in to teacher education at the primary level in Rajasthan. It found that the institutions feel that the syllabus was some what ambiguous and the syllabus for craft was heavy, its teaching required a lot of funds, and the teaching staff had inadequate training. *Upasini* (1966) evaluated

the existing teacher training programme for primary teachers in the state of Maharastra with special reference to rural areas. It found that the present position of the professional training of primary teachers was evaluated satisfactory especially if it was evaluated in the light of the new challenges in elementary education. *Banerjee* (1967) studied the training needs of primary teachers in India. The observations were that their weakness and shortcomings in the professional education of primary teachers vigorous attempts were needed to put the programme on the right track. *Ekka* (1999) studies on development of tribal education in U.P. after independence. The study indicated heavy droop-out (73.48% at primary and 84.11% at upper-primary stage), poor reaction (12.44 at the primary and 15.89 a the upper primary levels. Panda (1992 studied in the fuctions, organization and impact of the tribal school on the community and found that inspite of various facilities like in expensive hostels, provision of free text books, uniforms stationary e.t.c, these school are not able to maintain a high retention rate. Gopalan (1993) carried out a study on education and training in Kerala. Major findings of the study were stated as literacy percentage ranged from 58% to 78.82% among districts it was against the belief the Kerala had achieved 100% literacy and training programme for head teachers was also undertaken by DIETs (1995) studied on the enrolement retention and achievement of scheduled tribes at primary level. Shukla (1995) studied in the effectiveness of various interventions for improving tribal education (enrolement, retention, drop out and achievement). She

found that most of the interventions planned for the education of tribal children are welfare measures and are achieved at increasing their enrolment and retention and decreasing the droop rate. Betagiri (1996) studied the competencies and training needs of DIET faculty member in DPEP districts of Karnataka. The major findings were that the DIET faculty members did not consider themselves least competent, not competent of highly competent and most of the faculty members required a short term training programme with theoretical orientation. *Khan M.* (1999) stated that the face mode products of primary teacher education programme performed at per with their distance education counter parts on different teacjing competencies areas. *Kapoor. B.K* (2001) developed a suitable in-service training package for head masters of primary school and studied effectiveness of in-service training package in terms of reaction of participations and research persons. *Chandra Sekhar* (2001) made on evaluative study of diets in Andhra Pradesh and the major findings were that most of student, teacher and teacher educators were unhappy due to lack of recognisation to the teaching profession and majority of the student, teachers and teacher educators had not been able to acquire any teaching skills during the brief span of one month teaching practice and hence there was a large scope for continuous in-service programme for in-service teachers and teacher educators.

Above studies conducted in the area of in-service Teacher Education in India (which is present in the following chapter) reveals that they are basically survey type. The opinion of participants have

been studies about different kinds of teachers education programme in compartment from. They will reveal merit and limitations of different component teachers of in-service Teacher Education programme conducted at Institutional level. So far a very little effort has been made link research with planning and curriculum development of in -service teacher education, taking in to consideration needs and demands of teacher educators, curriculum inputs, fuctioning of existing programme experiences of participants and resouse.

REFERENCES

1. Dr. S.P. Chaube "Comparative education" Page No. 415 published by Ram Prasad & Sons, Hospital Road, Agra (U.P.

Chapter- 2

REVIEW OF LITERATURE

2.0 *Introduction*

2.1 *Studies conducted in India*

2.2 *Studies on Resource Persons and inference educatiion and DIET faculty members.*

2.3 *Studies on and technology in in-service education.*

2.4 *Programme evaluation studies.*

2.5 *Competency of teachers of primary schools.*

2.6 *Training needs of Head Masters of Primary Schools.*

2.7 *In-service Training Through Distance educatioin programmes.*

2.8 *Studies conducted abroad.*

2.9 *Need for in-service training.*

2.10 *Development of instructional technology.*

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2.14 *Instructional Design and methodology.*

2.15 *An overview of the related literature.*

2.16 *References*

REVIEW OF RELATED LITERATURE

2.0 INTRODUCTION

The form and purpose of education in a country are generally are keeping with the public needs there. India and Abroad are not an exception to this.In order to have a comprehensive idea of education in that country it is necessary to know about its culture, civilization and social, political, moral , democratic, economical, vocational traditions and changes

The studies conducted in different areas of teachers education for primary teachers with special emphasis on in-service education are reviewed under two heads such as studies conducted in India and studies conducted abroad.

STUDIES CONDUCTED IN INDIA

2.1. Planning and development of primary teacher education :

There have been a number of exploratory studies conducted in different states focusing on planning and development of primary level teacher education programmes.

State Institute of Education (Gujarat)(1965) conducted an investigation in to the problems of the trainees of the primary teachers. The main objective of the study was to know the position of primary education in Gujarat at with special reference to the primary teacher trainees. The main findings of the study were : (a) the syllabus needed some modification (b) the trainees had some financial problems (c) the attitude of the trainees to the basic education was positive (d) the

trainees liked the community life activities very much and (e) the quota of the craft was too much for the trainees.

State Institute of Education (Gujarat) (1966) made case studies of primary teacher training institution of Gujarat. The objective of the study was to get a representative picture of the position of primary teacher training institution of ?

A representative sample including 10 percent of the total number of primary teachers training institutions was selected for the study. A case study pro-forma was prepared and used to collect the data.

The study revealed that (a) more physical facilities were needed for Gujarat the trainees, as these institutions were residential units (b) all the institutions had adequate number of basic trained staff members (c) no institution had a science laboratory (d) there was no reading facility in these institutions (e) there was a grate need for adequate reading room for students and staff members (f) fifty percent of the staff members needed refresher courses (g) there was no proper planning in the provision of facilities for the teachers training.

SIERT, Rajasthan(1966) conducted an investigation in to teacher education at the primary level in Rajasthan . The study revealed (a) The average intake was about 1.3.0 The qualification prescribed for admission to the STC course was the High / Higher secondary Examination (2) About two-thirds of the trainees belong to the rural area. (c)The minimum age prescribed for refresher was 18 years whereas

the age of the trainees ranged from 18 to 45 years. (d)There were head-masters subject teachers ,craft, agriculture , physical education and drawing instructors on the teaching staff. (e) The syllabus was prescribed by the Department of primary and secondary Education of the state government and was followed in all the institutions. (f) Some of the institutions felt that the syllabus was some what ambiguous. The syllabus for craft was heavy its teaching required a lot of funds, and the teaching staff had inadequate training (g) Many difficulties in making arrangements for practice teaching were faced because they did not have demonstration schools. (h) Out of fifty training institutions thirty –seven had their own buildings. Eleven were housed in rented buildings. Out of the remaining, one was functioning in a Dharmashala and the other was located in a high school building. (i) The expenses of the government training institutions were met by the government. Aided institutions got grant-in-aid from the government. stipends to pupil teachers were paid by the state government. The State Institute of Education provided guidance to the training schools.

Upasani (1966) evaluated the existing teachers training programme for primary teachers in the State of Maharashtra with special reference to rural area. The author has recommended the following : (a) The minimum qualifications prescribed for recruitment as primary teachers or for admission to training institutions should be completion of a secondary school courses. (b) The present position of the professional training of primary teachers is far from satisfactory

especially if it is evaluated in the light of the new challenges in elementary education. (c) A very serious defect in the practical training is the tendency of confine the practical training to the prescribed number of practical lesson: what is actually needed is a wider conception of teacher education and provision of opportunities to student teachers to acquire various skills. The Indian child needs down-to earth grassroots knowledge of the country's condition. So the teacher has to be a well informed, well grounded' effectively participating citizen and he has to bring in to action special resources of scholarship and practical competence. (d) There should be special agency for the supervision of training colleges (other than the education Officers who are otherwise busy) with a special officer at the directorate level. (e) The duration of the primary teachers training should be extended to two years.

Banerjee (1967) studies the training of the primary teacher in India. An interview schedule was prepared covering the different aspects of training of primary teachers viz; aims and objectives of training, organization, curriculum and syllabus, practice teaching, community living, examination, teaching staff, wastage, supervision, community development, in-service training and pay allowance. Different authorities in the 16 states of India were interviewed with the help of this schedule.

The following observations were made on the basis of the data collected :

(1)   There were weakness and shortcoming in the professional education of primary teachers and vigorous attempts were needed to

put the programme on the right track. (2) Basic education attached great value to the child and real development would take place only under conditions of freedom (3) In the new age, the schools, the teachers, the training institutions had to pay a great role in changing the old patterns of education. (4) The number of student teachers, explosion of knowledge and democratic living all these placed upon the training institutions a responsibility of unprecedented magnitude. (5) A training college had to address itself to the task with a sprit of high adventure and faith.

Mallaya (1968) studied the modern trend in the teachers training programmes and the problems of teachers training in Madhya Pradesh with a view to suggesting wage and means to make it more effective. Several official reports, documents and magazines provided the main source of information. Visits to various teachers training institutions were made in order to collect the views of heads and other staff members.

The study revealed that : (a) The primary teachers training facilities were insufficient in Madhya Pradesh and Montessori training was very costly and it needed reorganization (b) The existing teachers training facilities at the primary and secondary levels which were considered sufficient, could be made more effective by strengthening the science teachers' training at all the three levels rationalizing the selection of candidates for training and introducing practical aspects of teachers training such as practice teaching, community life, preparation

of teaching aids, games and sports, and cultural activities, (c) it was observed that there was no proper dissemination of research findings in the field and traditional teaching methods were followed, (d) evaluation techniques were mostly of routine type and showed large variations in internal and external assessment, (e) Madhya Pradesh is mainly an agricultural state, agriculture cooperation and rural Upliftment activities could be included in the teacher training programme and more of out door activities be organized (d) better coordination in the programme of teachers training at various levels could make them more effective (e) the teachers' training institutions in the state did not have adequate library facilities and periodicals and magazines to which they subscribed were less in number (f) coordination at different levels of teachers training was lacking and (g) there was no provision for training the inspectors of schools and social education organizers.

Arora et. Al. (1974) under took a study of the national survey of teacher education at elementary level with the objective of collecting data concerning major areas of elementary teacher education such as students and staff, facilities and service, programmes , administration and supervision etc. with a view to (a) Compiling a national report which could be used a reference documents, and (b) locating weak areas which needed strengthening and thus required special attention of the NCERT. A comparative questionnaire was used for the purposed of survey. Data was collected from all the elementary teachers' training institutions of India. the draft report which emerged

out of the data was sent to the SIEs, Directors of public instructions and the field advisors for comments and suggestions. The final report was prepared after their incorporation. The following were the major findings of the survey: (a)about 59.9 percent institutions were located in the urban areas while 48.3 percent in the rural areas: 54.71 percent institutions were residential in nature, 22.84 percent were partially residential and the rest were not residential, 46.30 percent of the institutions were co-educational, 35.89 percent were for men only and 17.01 percent were for women only : 63.18 percent institutions were run by state government ,27.34 percent were run as private aided and 9.47 percent were as private unaided (b)quite a fair justice was in the selection of candidates for admission to training institutions the main criterion being the marks obtained at the matriculation examination. S ome seats were kept reserved for scheduled castes. Scheduled tribes and deputed teachers too there was a good provision for stipend in almost all the government training institutions no tuition fees was charged (c) in majority of the states, the minimum qualification required for the recruitment to the post of principal as well as teacher educator was trained graduate (d) in most of the states the syllabus was prescribed by the State Department of Education most of the theory papers in different states were almost the same the common papers were Principles of Education, Educational Psychology, Teaching of Mathematics, Teaching of Science, Teaching of Social Studies and Teaching of Languages, in many states there was optional theory papers, practical

teaching programme had a vital place in all the states, a little more than 50 percent training institutions had demonstration schools in side their campus but most of them had inadequate accommodation and ill-equipped staff, (e) in many of the states the trainees had to practice one major and one subsidiary craft, (f) in most of the states, the final examination was conducted by the states departments of education usually there were internal and external assessment for theory papers, practice teaching and crafts, (g) poor physical facilities were observed in many respects, viz: lack of science laboratories inadequate buildings, inadequate accommodation in the hostels, no good libraries, no trained librarians and no adequate number of books and magazines (h) in case of government institutions the grant from the government formed the only source of income, in the case of the private aided institutions also, considerable responsibility was born by the government and in the case of the private unaided institutions the main source of income was contribution from the management donations, income from fees, capitation fees etc, and (i) some senior officers from the Directorates of Education inspected the institutions and provided academic as well as administrative guidance.

Gopalan, Beena (1993) carried out a case study of a few District Institutes of Education Training in Kerala .Major findings of the study were: (a) The literacy percentage ranged from 58.32 to 78.82 among districts which were against the belief that Kerala had achieved 100% literacy. The female literacy percentage was less than of the

men.(b) Audio-visual aids such as slides, slide projector, maps, charts, cassettes, radio were available in all the DIETs did not films, video cassettes, VCR, TV etc. (c) Reference material , books newspaper were available in all the DIETs. (d) In all the five DIETs the pre-service offered was the Teacher Training course (TTC) . (e) Training programme for head teachers was also undertaken by DIETs. (6) District Resources units of all the DIETs had organised programmes for adult education.

Singh and Kumar (1996) Attempted to study the training needs of primary school teachers

Mohapatra (1996) aimed at identifying intervention areas for improving teaching of EVS II .

Bhattacharjee (1997) prepared a conceptual modal of teacher empowerment at primary level : contextual issues, emerging paradigms and parameters

Laxmi Naryan (1997) Studied to know impact of Andhra Pradesh primary education project in-service training on teacher empowerment with special reference to profession skills of primary teachers

Mishra (1997) Attempted to study the effect of the module to empower the primary school teachers in developing local specific competencies based curriculum

Gupta, Sharma, Bhattacharjee (1997) made in assessment of the training needs of primary school teachers in language and mathematic in DPEP districts of Assam.

Grewal, Grewal and jagwani (1996) attempted the development and validation of needs assessment survey technique for the identification of training needs of primary school teachers in a district **2.2   Studies on Resource persons and in-service Education**

and DIET faculty Members:

Butala (1987) The new Educational policy (1986) stated that it is urgently necessary that gaps between functionality and set targets should be pointed out and this will help in planning teacher education programme for the desired role of the teacher, in guiding students building their character and promoting innovations. The related studies on this aspect revealed the following:

A-   Programme of in-service education were planned through the advisory committees.

B-   Most of the resource persons feel that monetary allowance was the best incentives.

C-   Coordinator felt the need of special training to enable them to play this role efficiently so that training could be provided by state institute of education and regional college of education.

D-   Coordinator should continue to work as a lecturer.

E-   The resource person had experiences of in-service education programmes in school subjects, as well as subjects related to school administration and technology of training. Resources personal wanted a special training for them. A majority of lecturers felt that participation as resource person should be more compulsory for all the lecturers.

Manoj (1993) studied the '' Competencies and training needs of DIET faculty members in DPEP districts of Kerala. The major finding of the study were : (A) Most of the faculty members of the working in DPEP- DIETs were men. (B) Majority of the DPEP- DIET faculty members were from teaching background. (C) Almost all the faculty members of Kerala had a double post-graduation. (D) One third of the total DPEP – DIET faculty members were not willing to continue in the DIET. (E) DIET faculty members did not consider themselves least competent or not competent with regard to any of the competencies (F) DIET faulty members did not perceive the need for a long term training with respect to any of the competencies. (G) The DPEP –DIET faculty members in Kerala preferred to have : (1) Training programme outside the DIET (2) Seven to ten days for short term training (3) Less than one month or one to three months duration for long term training (4) Institutionalize type of programme.

Betageri (1996) studied the competencies and training needs of DIET faculty members in DPEP districts of Karnataka. The major findings were: (A) Most of the DIET faculty members did not have post – graduation in education and their professional qualification was B.Ed (B) All the faculty members had undergone one or the other training in elementary education. (C) DIET faculty members did not consider themselves least competent, not competent or highly competent . All of them considered themselves fairly competent (D) Most of the faculty members required a short term training programme with

theoretical orientation. For a few competencies they did not require training at all (E) The faculty members working in a particular wing of the DPEP perceived training as required to certain identified competencies. (F) Even though a DIET faculty member was likely to have more than ten years of previous experience, his experience in DIET was below two years.

The review relating to research studies conducted in the area of teacher education discloses that the efforts of central and State Government in making teacher education more effective resulted in marginal modifications only. The status of teacher education is still in bad shape. The present study is also an attempt to highlight the deficiencies in the pre-service programme conducted by the DIETs in Uttar Pradesh so as to suggest suitable remedial measures and make the process of preparing teachers more effective as quality teacher input is most important to bring qualitative improvement in primary education.

Chandra Sekhar. (2001) made an evaluative study of DIETs in Andhra Pradesh. The main aim of the study was to know about the perception and attitudes of the student , teacher and principals about existing training and different aspects of DIETs. The major findings of the study were : (A) The curriculum of teaching programme is outdated and it should be reconstructed and reorganized according in the needs and expectations of the young trainees. (B) Most of students and teachers are unhappy due to lack of recognition to the teaching profession. (C) The DIETs are ill-equipped with regard to the physical and academic

facilities. (D) The teacher educators have expressed their concern over the deteriorating standards in teacher education. (E) Majority of the principals have accepted that they have not conducted workshop to develop the primary school curriculum and that they never convened parents meeting.(F) Majority of the students and teachers have not been able to acquire any teaching skills during the brief span of one month teaching practice.

2.3 Studies on and Technology in in-service Education

Mohanty et al. (1976) studied the reaction of teachers to educational TV programme for in-service primary teachers. In another study (1978) the same scholars assessed the popularity of radio programme among the participants in an in-service teacher education programme The increased used of media like TV and radio in education in India were the contents of various programme.

Tickton (1970): - Has a narrower meaning and relates to a technology instruction per second. It basically means technology relating class organization, content organization, stimulus Variation, response elicitation, monitoring and feed back, it also includes learning to learn.

Novak and Gowin (1984) and concept mapping **Novak (1990)** Informatics relates to sciences of information, Its organization access and retrieval. Telematics refer to using telecommunication in information technology. Communication technology refers to organization of message, noise barriers, decoding of messages Cybernatics forms an important part in all the above sciences.

Umed Singh (1995) developed study material relating to video instructional package for teaching environmental awareness. It was field tested and used in three schools in Gujarat, U.P. and Rajasthan and was formed to be very effective and interesting. The study also reported that student enjoyed working though video package

Kothari and Chowdhari (1995) Studied the impact of television programme on behaviour of student at age levels, and they found that girls had more positive effect on their emotional and creative behaviour than boys. As regard the impact of television programme on moral behaviour, negative behaviour was more than the positive one

Mama (1980) revealed that colleges of education conducted a variety of programme most of which deal with subject matter, planning of tests, evaluation and audio- visual aids.

Sahoo (1985) revealed that the multimedia packages were more helpful for teachers to improve their efficiency of profession.

Butala (1987) revealed that the main mode of .employed in the programme were lectures, Seminars, and workshops. In-service education programme focused on school curriculum. A few situations focused on educational technology administration and management. *Grewal* et al. (1989) indicated several strong points and also some short coming in the implementation of NEP. However it was one of the major experiments in the study of in-service education.

Khan(1989) stated that media have a large potential of distance education modes. Most of the trainees pointed that TV and

radio must be included as components of distance education training activities. He expressed that radio and TV can make training interesting and effective .

Aiholli (1993) found that experts and teacher educators had given their responses about the following items under acquaintance with new educational technology:

A-   It should use educational audio recording.

B-   It should use educational video recording

C-   It should use videocassettes players

D-   It should use audiocassettes players

E-   They should be partly studying through distance media partly attending the course in training institutions.

F-   They should be pursuing the course through open university/ distance education institutions with no campus attendance.

2.4 Programme Evaluation Studies:

The following studies indicated that interesting findings on reaction of participants towards in- service education and its evaluation.

Srivastava (1966) Revealed that the attitude of the teachers towards the profession as well as towards the extension programme were very positive after attending four extension programme. The improvement was found after participating in the first activity and it went on improving up to the stage of participating in the fourth activity.

Mama (1980) revealed that A-No effort was made to involve teachers in the planning evaluation and follow up of in-service programme.

B-   In-service programme were run as week and courses.

C-   The teachers were some times prevented from attending in-service programme by the principals.

D-   The concepts of in-service education was not clear to the teachers.

Sharma (1982) revealed that for the development of education and education ministry should look in to the problems and see that the in-service education programme did not remain on paper only. They had to organize the extension centers create conditions for the effective functioning.

Sahoo (1985) stated that studies have been conducted on stydying existing patterns of internal and external evaluation, continuous evaluation and exploring suitable alternatives in teacher education.

Abrol, P.C. (1987) Studied on the constraints in the deductibility of three tribes in the jammu region. The study aimed at identification the out of school and in school constraints in the educability of tribe's children perceived by the community, the students and teachers. The study found that poverty, poor schoolfacilities, parental apathy and inconvenient location of the school were the major constrains.

Butala (1987) revealed that: Teachers were in favour of in-service training programme being organized on working days. The second preference was summer vacations. Teacher participants considered attendance Certificate as proper incentive for participatory in-service programmes. They however desired that such attendance

should be considered as necessary qualifications for the purpose of evaluation.

-       The in-service education programmes were not conducted systemtically.

The quality of in-service programme was rated fairly high by teacher participants. They felt that the programms were useful in forms of their professional growth.

Ramana,G.V. (1989) studied on the problems of education among the tribes communities of Andhra Pradesh. The study points out that the infrastructures of Ashram school is poor, the teaching-learning process not satisfactory, and the absenteenism, stagnation and wastage are high. The investigator found a perceptible impact of the ashram school on local community.

Ekka, E.M. (1990) studies on development of primary education in U.P. after independence and concentrated on issues related to educational facilities, enrolment, literacy, effectiveness of various welfare schemes and overall developments of primary education. He studied heavy drop –out (73.48% at the primary and 84.11% at upper primary school stages) poor retention (12.44% at the primary and 15.89% at the upper primary levels. The researcher attributed low level of education of primary to their inability to derive benefits from various welfare schemes planned for improving their education.

Panda, B.K. (1992) studied on the function organization and impact of the primary schools on the community and found that in

spite of various facilities like inexpensive hostel, provision of free textbooks, uniforms stationary etc. these schools are not able to maintain a high retention rate. The Instructional activities in these schools were found teacher centered and monotonous which resulted in poor performance at C-V level. Even the parent's response to the functioning of the school and its relevance to the community was not positive.

Ambasht, N.K & Rath, (1995) studied on effect of household, community and school factors on the enrolment, retention and achievement of scheduled tribes at primary level. The study found the effect of cluster of household and school factors on achievement of primary schools children.

Shukla N. (1995), studied on the effectiveness of various interventions for improving primary education (enrolment, retention drop- out and achievement) She found that most of the interventions planned for the education of primary children are welfare measures and are achieved at increasing their enrolment and retention and decreasing the dropout rate. N0 specific intervention, except merit scholarship, aims at increasing the level of achievement of primary children. Only one state i.e. Madhya Pradesh has on academic intervention in the form of training of teachers working in tribal areas which has been planned to increase the level of achievement of the tribal children.

2.5 Competency of teachers of primary schools :

Agarwal (1969) made an effort to measure the competence of teachers of primary school of M.P. The major objective of the study

were (a) to develop and validate a tool to measure the competence of teachers (b) to asses the class room teaching competence of teacher with reference to product criteria (c) to develop booklets dealing comprehensively with measurement of job efficiency (d) to identify the cause of in-competence of teachers, and suggest means to improve competence. The study revealed (a) more than 53% teachers were not intelligent enough to be teachers and intelligence was similarly and positively related to the subject knowledge (r = 0. 42) (b) of the primary teachers 52.6 % did not like the teaching profession and there attitude was significantly related to competencies of classroom teaching and of conducting extra class room activities (r = 0.422 and r = 0.466 respectively) (c) about 70% teachers passed in the III rd division and about 50% did not possessed adequate knowledge of the subject to be able to teach competently. (d) in the classroom teaching about 52% teachers were below average where as 47.35% were weak in competence of organizing co- curricular activities, school programme and other activities of the school. (e) the main problem of teachers listed were low salary irregularity in increment, salary incommensurate with qualifications and transfer etc. (f) the problem faced in school were multiple class teaching, attendance and the number of the student in the class poor accommodation, non availability of teaching aids teacher parents relationship, supervision and relation between school and the community. (g) according to the evolution of administrators, inspectors and head master considered 40% teachers as competent and the teachers considered 42% of them as competent.

Gupta and Kaur 1993 made a factorial study of teaching competence. Shamala 1997) attempted a conceptual model for enhancing teaching competency through intervention of art education for effective language teaching at the primary stage

Panda 1996 assessed the effect of competency based instruction in achieving MLL competencies in grade IV in Oriya medium primary schools

Mishra 1996 compared the traditional U.S. competency based teaching in environmental studies in primary classes.

Mohan 1998 made a factorial study to identify the factor involved the effectiveness of teaching.

Sharma and Kumar 1993 assessed the relative importance of teaching skill from the view of secondary schools of teachers

Khuntia(1996) evaluated competency-based teaching - learning in mother tongue in primary school.

2.6 Training Needs of Head Masters of primary Schools: SIE, Maharastra (1971)

Studied the training need of head masters in their academic and administrative work for preparing programme of in-service training. The sample of the study constituted head masters of 103 primary schools and the tool used was a questionnaire with two main divisions- the needs of head masters as teachers and administrators.

Head master's powers and duties, relations between headmasters and his assistants, school inspection and its method were the major areas suggested for training.

Kanwar (1990) has studied the training needs of heads of middle school of sonitpur, Assam. He used questionnaire and discussion-cum-interview methods. The researcher identified 15 themes and asked the respondents to take various themes in terms of preference based on seven-point scale. Disciplining, controlling, maintenance of records time and financial management training making performance appraisal and human relations where the various themes ranked by the head masters in terms of preference.

Kapoor, B.K. (2001) conducted a study titled " Development and Validation of in-service Training Curriculum for primary school head masters of Delhi." The study was conducted with the following objectives (a) To assess the effectiveness of existing in-service training programmes in terms of reaction of head masters who had attended the programmes successfully. (b) To assess training needs of head masters in the context of their job analysis done through perception of education administrators and head masters. (c) To explore future prospective of training programme for head masters as perceived by head masters and experts. (d) To develop a suitable in-service training package for head masters of primary school. (e) To study effectiveness of in-service training package in terms of reaction of participants and research persons. The major findings of the study revealed that as a singnificant outcome it was observed that a primary school head master was involved in various kind of management fuctions besides teaching activities. One hundred and twelve kinds of activities are performed by

head master. Such activities are covered under SiX cluster, viz general administration, liaison and educational management, information system (EMIS), financial administration , academic management, inspection and supervision and personnel management fuctions. However , urgent training needs were identified mainly on the areas of academic management, financial management and school supervision. Training needs were also identified in the areas of personnel management. A few significant topics were identified for the training package. The package included multimedia programme giving major emphasis on the study of self- instructional material and trainees participation and research person reactions. The study implies that by integrating context specific needs as major focus of in-service programme may lead to quality improvement in management of school system.

2.7 In- service Training Through Distance Education Programmes:

Khan M. (1999) conducted " A study of effectiveness of in-service Teacher Education at primary and Secondary stages through Distance Education mode in M.P. in terms of curriculum relevance and general teaching competencies. "The major findings of the study revealed that there was no significant difference between mean teaching competency scores of in-service teachers completing BTC studies through distance education mode and regular face to face mode. However significant differences existed between mean competency scores of graduate teachers taking B. ED courses through regular face

to face mode and distance mode The face to face mode products performed better than their distance education counterparts on different teaching competency areas.

The in-service teachers pursuing studies through distance education mode appreciated the utility of course units to a certain extent. they found practice teaching programme effective . Only around 35 percent teacher respondents of B. ED programmer reflected on positive impact of in-service education programme on various dimensions at average level. On the other hand around 48 percent of primary school teachers perceived most positive impact of BTC programme offered through distance education. Most of the teacher-educators perceived the quality of such programme at an average level. It was also stated by a large majority of products of distance education about positive role of distance education in contributing towards improvement in teaching skills and competency Moreover, distance education helped in catering to the needs of in-service teachers in the contest of academic social and professional areas.

Kamat (2001) conducted a study at Mumbai . The study has reported that the traditional approach to in-service training of these teachers is primarily face to face. It is modified model by which one can reach at more number of teachers. In order to reach a large number of teachers within comparatively shorter time span and in cost effective manner we can call it non- conventional mood. Three generations of distance education mode are correspondence education multimedia and

online education where individual can overcome their isolation and draw benefits from interacting with the group. Indian educational scene is the second a generation of distance education which is prevalent. Taking this in to consideration a project was undertaken for training of primary teachers through distance mode using a multimedia package. implementing instructional sessions and evaluation and feedback. It is planned to use more comprehensive teachings of assessment in the future training of trainers (who are expected to conduct interactive training and not impact one way lectures) In implementation, the trainers were the self-learning materials (SLM) writers. The need to train more trainers was felt.

Singh's (2001) study revealed that many teachers had inadequate understanding of the learning materials. They have less teaching skill and are poorly motivated to learn the study material . Thus in the next decade, there will be an essential task of preparation of learning material and motivation of in-service teachers. The study was undertaken with the objectives to find out the weak areas of the existing teacher training programme to find out the training needs of the teacher working in formal primary school and effectives use of distance learning material of training package. The study was planned by organization of workshop to identify the deficiencies of existing teachers training programme assessment of teacher training needs through questionnaire workshop, vision workshop on the use of existing distance learning material and review workshop to evaluate the training

programme. sample size to identify the deficiencies of existing teachers training were twenty teachers and five resources persons, one thousand teachers for collection of opinions. Sample size for workshop to identify the training needs were ten teachers, five PRTs five Rps ten trainees five guardians. Three experts and five educational administrators were taken. One day workshop was Organized in DIET Tonk consisting of primary school teachers and trainers to discuss the issues regarding successful organization of teachers training. A draft questionnaire was developed and sent to SCERT and all DIETs and other institutions having expertise in teacher training. The major areas for in-service teacher training. were challenges of universalisation of primary education (UPE) in Rajasthan , District Primary Education programme needs of in-service teacher training relationship between work and role sensibility communication skill , evolution of achievement level of students, multi-grade/level teaching how children learn, joyful earning creativity teaching methods, diagnostic and remedial teaching evolution process, language teaching, mathematic teaching, joyful teaching practices in environmental studies (EVS) maintenance of records, effective school environment, community contract skills, school mapping and micro planning with practical works and co-curricular activities. The steps followed were organization of workshop to develop module on pre-decided training areas how to make the residential training effective what should be the training for the morning and the evening sessions, how to make organizational effective. Teachers training

modules were developed by the members of State of Resource Group (SRG) and training programme was organized for resource persons at district head-quarters in ten DPEP district. In the last a review workshop was organized to evaluate the programmes. The main observations were, training should be fully residential, training one thirds had two way communication, participants were active and resource persons were working as facilitators, morning and evening sessions were reported as effective and useful, use of video cassettes was found helpful to make the training effective, topics related to communication skill-creativity, relationship between work and role in the context of teachers sensitive and other activities to make the teacher skillful were found satisfactory to make the training motivational, teacher expressed there views to extend the duration of the training teachers were eager to know much about disabled children to identify border line cases and teachers and resources persons where of the opinion that the video cassettes should be developed in the context of Rajasthan State, which would make training more useful.

2.8 STUDIES CONDUCTED IN ABROAD

The studies conducted in different areas of in-service education are reviewed as under

A- Structure of Training in UK and Nether land :

There are signs in the United kingdom as well as in the Netherland that a structure of training is evolving in response to reassessment of the support needs of head teachers by latter (1983)

urge a broadening of concept from training to planned development. He reminds that much professional learning and development occur in an unplanned spontaneous way and that planned development need by no means be restricted to formal instruction, which often seems to be the whole connotation of the term training. More over training prevision is now being perceived with the broaden framework of management development.

B-General purpose of primary education in U.S.A.

The main theme of programme of primary education is to given elementary education of citizenship of children fulfil their basic educational needs and start there socialization in keeping with the requirements needs of society. The main programme of primary schools like that of nursery and kindergarten once trained children in living reading and playing together and to strength school relationship by developing in them be fitting attitudes

C- Primary education in France

The primary education is thus self- contained and well organized. This position of primary education of France has made it an object of constant discussion in the educationists of the country

D- Disciple in elementary schools in Soviet Russia

The principal purpose of education after the Russian Revolution was the all round development of children and the policy adopted in this field were more or less progressive in outlook. It was therefore evident that no clear-cut outline could be chocked but in

relation to discipline at that time. But very soon the government give attention to this problem and in outline of the scheme relating to discipline in the schools was drawn up. This scheme was not in the least of influenced by principals and philosophy of education as practiced in other nations. It was entirely a Russian concept

E- Primary education in modern Japan

The duration of primary education was generally of six years. Student between the age of six to twelve years received primary education. Special emphasis was laid on music and handicrafts. Through history and geography the student were made to realize the bright future and prosperity of country. Moral and character building education was given to the help of personal examples of emperors and great patriots. Along the character building proper arrangement were made for physical education as well.

F- Primary education in modern China

Primary education in China was reorganized in 1922. before 1922 primary education was more or less traditional. as a mater of fact ; the Primary education in China is practically a problem relating to rural areas. Two things are worth noticing in this respect. The first thing is that the majority of the people of china are agriculturist, and secondly , their economic condition is not good. Due to these factors, first of all single teachers were schools were opened in china. Then was gradually chang in various types of primary schools. The government of republic of china made changing the primary education set up and introduced a 4+2 Six yearly curriculum.

G- Primary education in modern Turkey

The provision of teachers for primary education has an important place in Turkey. An eight months training was provided to those soldiers who despite there good work failed to received promotion in the army. These soldiers were trained and appointed as teachers in primary schools. with these classes these teachers were called Egitman

H- Sri lanka case stuidies , identification of training elements

Sri Lanka Ministry's "Diagnostic study on educational management " conducted in 1981 and other general research on processional development identified 20 training elements in a rank in a order of priority.

Hurst and Rodwell (1986) stated as follows: " the same study has also identified training needs on a futuristic basis, based on the contemplated changes in the proposal on educational reform. The training needs identifier was school mapping, teacher utilization educational technology , curriculum development, and new dimensions of non-formal education , store management and sharing of resources . community development , problem solving approach as a basis for school level planning resources allocation sharing of resources. Community development, problem solving approach as a basis for school level planning resources allocation.

I-Training strategies in U.K. continue development

Training in the UK associated with the requirement to identify learning needs is opted as low priority issues, as a cost rather

than investment, the training philosophy for continuing development, There predominate methods of assessing training appraisal each formal review between subordinate and supervisor where they jointly reach the conciliation on the training needs of the subordinate. Often it is reputed to become a bearing routine. Superior dominates in this routine. Both parties are limited by there perceptual boundaries.

Harper and Hussey (1987) reported the "managers are all trained to plough the same furrow as their boss may not meet the strategic requirements of the times ". A diagnostic view of training pointed out that the most important determinates of the training are the tasks to be done and the employees, abilities and attitudes. When we compare these inventories of tasks as responsibility on the one hand, and the course description on the other, a pattern of marked similarities and contracts begins to emerge. It appears that there are subsequently common areas of work in the rolls of head teachers or principals even between developing on the developed countries. At the same time, there are differences due to the local context both economic and cultural.

2.9 Need For In-Service Training :

A number of studies were conducted on needs of in-service education of secondary school/ Middle school teachers like **: Kim (1992), Por (1992), Salleh(1993) , Smith(19193), Kyle (1993), Seed (1994), , Robeldo (1994)), Katz (1994) Smith and Simpson (1994) Kim (1992)** pointed out that teachers need to be made more competent through effective in-service and pre-service training. **Por**(1992) study

indicated that these training courses are real answers to problems and needs felt by teachers in their school contents as well as being a special moment for the analysis of their personality acquainted "know how ''during the course of their whole teaching career.

Salleh and Amir Bin (1993) revealed that knowledge of sub-matter content, instructional and class room management skills, and knowledge of skills in assessing progress in students learning were the major areas of in-service programme. In many respects, teachers were significantly different in terms of their problems and their needs for in-service training and comparisons were made based on their qualifications and their teaching experiences. This study showed the importance needs assessment in planning in-service training for teachers. Also the findings of this study suggested that among training planners and organizers, more attention should be given to all teachers, problems or special needs, their differences and their specific needs for in-service training identified in this study. Several recommendations for further needs assessment studies are also presented.

In smiths (1993) study three most frequently appearing characteristics were shows: .

A- Willingness to participate in in-service programme

B- Ability to maintain confidentiality of information about students and

c- Demonstrates warmth for children.

Kule (1993) studied the perception of the differences between "what is " and "what ought to be " on subject matter curriculum, staff development, teacher team with a common groups of students, and teacher advisory groups. National Principals perceived more in-service educational provided for their schools in these areas.

Seed (1994) Highlighted that the purpose of the case study was to explore the needs of teachers in the midst of school change. This study describes the perception of teachers in changing school and chronicles the events that occur during the school years. The study provided an in-service understanding of the circumstances and the meanings of the participants derive from them, a focus on the process and content, and insights in to education practice that will affect policy and future research.

Robeldo (1994) revealed that secondary teachers who are expected to make a major paradigm shift from teaching in classroom by ability to learning in heterogeneously grouped class room must be provided with continued and supportive staff development. The collaborative meetings and journal approach must be further utilized and assessed as a successful means of teachers training. The study revealed a new awareness of how students of different abilities learn and were encouraged to implement creative approach to teaching through training.

Kartz (1994) revealed needs for a better conceptual understanding of teachers learning. The teachers look in new rolls such

as teacher leader and staff developer while maintaining a joint work structure. What has been learnt adds to the discussion about school change and how the new roles takes and responsibilities of teachers affect teacher.

2.10 Development of Instructional Technology :

The studies like **Kim (1992) , Mahady (1992) , Yalin (1992) and Robeldo (1994)** focused on this aspect.

Kim (1992) found that majority of the teachers recognized the value and benefit of using technology in education. Audiotape videotape records were the most frequently used instructional equipment in classroom in Korea. The three most desired types of instructional equipment for classroom used were the video tape recorder, computer for instruction, and overhead projector.

This study has several implications on policy makers, and school administrators. Organized and consistent support for in-service and pre-service training that emphasizes the practical utilization of technology will enable teachers to increase their technology in the class room Considerable planning land efforts for teacher training needs go occur if technologies in education are to be integrated in to the educational experiences of the student. Also, strong commitment and leader ship from the hightest levels of educational administration will be necessary for the successful development of instructional technology programme in Korean schools.

Based on the findings of the study it is recommended that:

A-   The school facilities be modernized to facilitate utilizing instructional technology.

B-   Strong leadership and support at the national level should be initiated towards systematic planning for technology use in the schools.

Mohady (1992) reported that the most preferred types of media as reported by the high schools teachers were text-books and reading materials chalk-board, transparencies, video tape or video cassettes, lab kits, manazines, newspapers and computer programme.

Yalin (1992)) study reveals that Secondary School teachers preferred integrating educational technology competencies with sub-matter methods courses while faculty of College of Education viewed on credit introductory courses in educational technology as their choice for an academic approach to developed educational technology competencies in future Secondary School teachers.

Rebeldo (1994) Revealed that teachers need a supportive staff development environment in order to successfully learn, practice and adjust different instructional strategies in heterogeneously grouped class rooms. Aims must be provided with continued and supportive staff development. The collaborative meeting and general approach must be further utilized and assessed as a successful means of teacher training.

Time built in to the staff development process for teachers to meet in a collaborative environment is essential. Give the support,

training and instructional materials, teachers can do make major changes in their instructional programme. Teachers became less dependent on didactic instructional approach and become proficient in implementing interactive, students centered and problems solving strategies.

2.11 Multi cultural Education:

Bicker (1993) Yagan (1994) conducted studies on this area **Bicker (1993)** revealed that all responding districts indicated that they did have strategic plan in place for multicultural education in-service teacher training. Moreover it appears. the public school districts have not become to prepare their in-service teachers to function in a multi cultural classroom. These findings have lead the researcher to conclude the educational leaders of Bouquet country have done little, If any thing to perpetuates the concept of multi culture and increased integration of teaching staff. The research analysis revealed that what is needed for culturally congruent behavior was culture knowledge and the absence of anti-black attitudes. The result suggested that black men, black women, white men differ in their knowledge and use of African, American cultures. Black men and White women were most biddy to be culturally responsive teachers. Additionally the racial composition of a school's faculty approved to influence teachers use of culturally responsive teaching methods.

2.12 Planing and Evaluation:

Studies on planning and evaluation were conducted by Wang (1993) and Diaz (1993).

Wong (1993) focused on attitude towards between in-service teachers who have and who do not have in-service planning and evaluation experience. For those with previous experience, the types of in-service training programme their preference were examined but so was their willingness to participate in in-service planning and evaluation in near future.

The results indicated that the independent variables employed in this study appeared to be significantly different in their attitudes towards the current programme. The interview results also indicated that individuals teacher wanted to have more opportunities to participate in in-service planning and/or evaluation. They wanted to see change occur.

Diaz (1993) study's findings were that the majority of the teachers, before the in-service training, felt they had deficiencies in all three phases of instructions (planning, delivering and evaluating instruction) . Changes in levels of confidence were evidenced after the year long in-service training period. Comparison between students of in-service teachers and comparison of teachers on ITBS (I owe test of basic skills)were attempted. However, these comparisons were made by the fact that the students of the in-service group generally scored lower on pre-test measures than the students of the other teachers. District comparisons were simply not fable. At no stage did students from the in-service teachers classes significantly perform better than the students from classes in which teachers had not undergone the in-service experience.

Por (1992) revealed that statements from categories that try to catch the real meaning attributed by the teachers not only to the training courses but also to the perception that they have of their own teaching practice and of the factors that contribute to school failure. This study also indicates that these training courses are real answers to problems and needs felt by teachers in their school content , as well as being a special moment for the analysis of their painful acquired " know-how"during the courses of their whole teaching career. From those the principal strategy among several others suggested refers to the teachers' re-learning done within the school where they teach, using action research.

2.13 professional Growth of Teachers:

Studies by smith (1993) and Kaerta (1994) were on this area.

Smith (1993) revealed that in-service education has ability to maintain confidentiality of information about students. Twelve competencies of aids were found repeatedly in the literature and in south Carolina (S.C.) school district documents the three most frequently appearing competencies were :

A-   Can work with small groups to re-enforce skills introduced by the teachers.

B-   Can assist individual children in need of special personal attention and

C-   Can perform clerical work. Has ability to work effectively with adults and children was rated the most important by both principals and suffering teachers.

Katz (1994) elaborated on the larger study by focusing on professional development issues and patterns. Changes were described in terms of the four aspects of the teacher-as-learner. User of A-technical skills, B-Reflection- inquiry and C-ollaboration. The findings support research that teachers change their thinking about teaching and learning over the long term as work structure alters and the students respond to new methods. As enquired the teachers assessed the project and their students and planned for continuous enhancement by writing successive proposals. As collaborators, the teachers took an new roles such as teacher leader and staff developer while maintaining a joint work structure what has been learned adds to the discussion about schools change and how the new roles, tasks land responsibilities of teachers affect teacher learning.

S.S. Kulkarni 2002 "Educational Technology may be difined as the application for the laws as well as recent discoveries of science and technologies to the process of education.

S.K. Mitra 2002 "Educational technology can be conceived as a science of techniques and methods by which educational goals could be realized.

Prem Kumar Joshi 2003 Teaching methods has used appropraitely to covers information, but it can not be used effectively

on its own to promote thought or change and develop attitudes without varations.

UNESCO 2004 It is established new aspect (a) *Scientific humanism (b) Creativity (c) Social commitment (d) Copleteman*

Dr. R.S. Mani 2004 Adult education is many sided endeavour, since its aim is primarly to develop in an individual a live sense not only of the privileges but also of the responsibilities of educational development.

Abha Sandal Asha Singh November (2005) Manu streamkng and in clusion of students with special educational needs are becoming a matter of primary in many countries around the world. The process is facilitated by growing awareness and sensitivity among deare alone various issues related to disalality. It has been future enhanced by various legislatioms and polices developed and put to practice by the governments in different countries.

Dia3- Maggioli (2003) Professional development as an on going learning process in which teachers engage voluntaries to learn how best to adjust their teaching to the learning needs of their students.

Sachs (racoo) Views, who has identified five core principles of teachers professional learning, partitation, celloboration cooperation and activities.

Raundas (2003) has agreed what it means values taken together specially what is means to be a soundly responsible and active professiional to the new mileenium.

(UNESCO 1996) Education plays a dominant role as an effective instrument of large scale achievement and revolution in all so here as purposeful education enable an individal to understand and study the real life situation and to develop an opportunity to creating confidence.

The Hindu 29 December 2002 Education is a form of human interaction. It is a social act that is made possible through a network of human relationships. The social Aspect of education is started by confidencing the dependence of individual upon are another for learning.

Sharma (2001-2005) Education creates in essence a everest competition for nobility the essence of achievement is instric to education.

National curriculum Framework 2005 NCERT Provides guidance to achieve its aim thesis.

1.   Langage teaching need to be multi lingal not only in terms of the number of languages offered to children but also in terms of evolving strategies that world use the multilingal classroom as reference.

2.   Home languages of children Found be the medium of learning in schools.

3.   In the Hindi status. Children learn Hindi. In the case of Hindi status Children language not spoken in their areas Sanskrit may also be studded as a modern Indian languages.

4.　At later srages study of classical and born language may be introduced to be implemented in its spirit prowring multi lingual communicative avalities for a multi lingual country.

5.　The three language formula needs to be implemented in its spirit prowing multi lingual country.

According to NCF (2005) The aims of education includes - independence of India and action sensitivity of other well being and feeling learning to respond manner predisposition towards participation in democratic process and the ability to work towards and contribute to economic process and social change.

M.S. Yadav and Varada M. Nikalje 2006 The need for changing and/or revising teacher education programmes has been constantly reiterated. The first step would be to bring out more clearly the domain of knowledge in teacher education and a conceptual understanding of the learning the teacher must acquire to perform his role as a practitioner. This would relate to content, learner and learning conditions and methods of teaching-learning and towards a interlinking these into an identifiable and unified domain of knowledge.[1]

B.N. Panda 2006 The conventional teaching-learning processes in the educational institutions no doubt faciliates the learning capacity of the children but lack in the ovarall development and growth of the child's intellect. Implementation of critical pedagogy in educatinal settings will provide the much-needed fillip in the learning process of the children in particular and in shapping a democratic society in general.

Critical pedagogy however should be treated differently from critical thinking. It is pre-occupied with social justice and examines and promotes practices that have the potential to transform oppressive institutions or social relations, largely through educational practices. The schools, the teachers and also the curriculum have an equally important role in adapting critical pedagogy in educational settings.[2]

R.P. Singh 2006 The present paper is a three-part presentation of a discourse on nationalism, national integration and how to deal with these issues at the higher levels of education. There is no nation if we go by its pure definition of nation as a homogenous entity. There are dissenting voices from sections of ethic groups and communities. The case of the Naga within the so-called Indian nation is an example. But there is a need of a common chord that transpires the diversities and promotes unity out of this diversity. This can be achieved if the youths of the country appreciate the composite culture of the country through open discussion and tolerance for the other.[3]

Chandrashekhar 2006 The critical analysis of the influence of personal and demogaphic variables on teacher educators perceptions and attitudes about different aspects of the DIETs. The sample of the study comprised of 10 DETs and 101 teacher educators. For knowing the perceptions and attitudes of teacher educators a perception scale and an attitude scale were developed by the investigator. For achieving the objectives of the study a two stage stratified random sampling technique was used. The results of the study revealed that the teacher

educators are unhappy with the existing physical facilities of the DIETs and also iwht the administrative styles of the principles.[4]

Ramachandran, Vimala (ed) : Gender and Social Equity in Primary Education Hieradry of Access. Sage Publicators, New Delhi 2004.[5]

Ramachandran, Vimala and ERU Team Snakes and Ladders : Factors Influenceing Successful Primary School Completion for Children in Poverty Contexts. South Asian Human Development Sector Report No. 6, World Bank, New Delhi 2004.[6]

Report of the Working Group on Child development for the 10th Five Year Plan, Planning Commssion, Government of India, New Delhi, 2001.[7]

Teacher Development of Better Pupil Achievement 2001 Report of Regional Technical Working Group cum Training Workshop on In-Sergice Training of Educatioal personnel, 29th Oct-16th Nov' 1985. APEID, UNESCO, Bangkok, 1986.[8]

Chattopadhyay Committee Report of the National Commission on Teachers envisioned the New Teacher as one who communicates to pupils "......the importance of and the feeling for national integrity and unity; the need for a scientific attitude; a commitment to excellence in standards of work and action and a concern for society.[9]

The Yashpal Committee Report (1993) On Learning without Burden noted " ....inadequate programmes of teacher

preparation lead to unsatisfactory quality of learning in schools.... The content of the progamme should be restructured to ensure its relevence to the changing needs of school education. The emphasis in these programmes should be on enabling the trainees to acquire the ability for self-learning and independent thinking.[10]

The National Policy on Education (1986) Orientatiion of school teachers gained momentum on a mass scale. Efforts have been initiated over the past few years to gradually develop a network of instituions like DIETs, IASEs and CTEs with the mandate of providing in-service educatin to primary and secondary school teachers respectively. So far 500 DIETs, 87 CTES s and 38 IASEs and 3 SCERTs have been set up as teachers education resource instituionals in the country. In case of IASEs and CTEs only a handfull of instittions have started in-service educatiion programme for secondary school teachers. During the last decasde the use of satellite interactive television based activities have been provided for teacher up-grading as part of the SOPT and DPEP projects. The majority of them however continue to perform their legacy functions.[11]

2.14 Instructional Design and methodology:

The study by *Keyser* (1994) demonstrates the use of instructional design methodology to analyze and resolve an instructional problem in the in-service education of secondary school health teachers. The problem for this study is the lack of systematic design in the in-service education for health education.

The study demonstrates that on in-service education programme for health educators in the areas of violence prevention land conflict resolution can be developed using instructional design methodology. It also provides a systematic method that can be followed in the design of other in-service programme.

2.15 AN OVERVIEW OF RELATED LITERATURE :

The above presentation gives a hint about the research work on certain aspects of in-service teacher education at secondary/ middle school stage abroad. The researchers had explored facts about major aspects of the needs for in-service training, development of instructional technology multimedia education, planning and evaluation, professional growth of teachers and instructional design and methodology followed in in-service teacher education programme. In India a number of research studies have been conducted on pre-service teacher education, very few research studies have been conducted in the area of in-service teacher education of elementary teachers. The above studies have highlighted on development of teacher education, practical utility of the programme, professional growth of teacher. The major focus remains on in-service training to be provided by District Institutes of Educational Training (DIETs) with due emphasis on training needs of teachers, use of multimedia packages and distance mode. It can be observed that the merits and drawbacks of in-service teacher education have been revealed in many respects. However, these studies have been conducted in isolated form and no effort has been made so far to develop the

comprehensive view about the in-service teacher education programme concentrating on present and futures needs of teachers of specific geographical belt. In this connection the investigation intends to develop a sound background for comprehensive frame work of competency based in-service teacher education of primary Schools highlighting, objectives of the curriculum nature of learning activities, organizations, resource centers, and resource person, perceptions of authorities, frequencies of orientation/ refresher courses evaluation system etc. As such, specific planning must have a futuristic out look .In this context, It is significant to study futuristic nature of above components education of in-service teachers. As specified in the first chapter U.P.State has taken fresh initiative on organizing in-service teacher education at primary State Since 1989. It will be worthwhile to know to what extent the programme are conducted effectively and efficiently and how best the existing experiences can be linked with bringing about quality improvement of in-service education programme. In this context reaction of the participants have been sought to study how far the courses were useful to the teachers and to study their opinion regarding resource supports like study materials, venues, atmosphere, classroom facilities, laboratory facilities, learning facilities etc. On the basis of futuristic trends and opinion of participant teachers and experts this has been intended to develop curriculum out lines of in-service teacher education primary teachers.

REFERENCES

1. Ram Chandraran Vimala (ed) Sage Publication 2004.

2. Ram Chandraran Vimala and ERU World Bank New Delhi, 2004

3. Report of the working group on chaild development, New Delhi 2001.

4. Teacher Development of Better pupil Achievement 2001 APIED UNESCO, Bangkok, 1986.

5. Ibid, Page No. 11

6. Ibid, Page No. 12

7. Ibid, Page. No. 18

8. Ibid, Page No. 19

9. 2.4 Teacher Education for Curriculum, Renewal NCRT, New Delhi. Page. 3, 2005

10. Ibid, Page No. 4

11. Ibid, Page No. 4

Chapter- 3

METHODS AND PROCEDURE

METHODS AND PROCEDURE

3.0 INTRODUCTION

The study has adopted future study methods. This study visualizes future's expansion of the system towards 2010 and looks for exploring suitable alternatives in the teacher education programme at primary school stage. The methods employed in the study are trend extrapolation, opinion studies and study of reaction of participants and experts towards the system. This chapter deals with methods and procedures adopted in the study. It has included multifold technique for achieving the objectives. The methods and procedures followed in attainment of objectives are mentioned under the following heads :

A-   Objectives

B-   Nature of data

C-   Source of data

D-   Tools construction

E-   Population and sample

F-   Data collection procedures

G-   Analysis procedures

A-   OBJECTIVES-I

The forecast strength of teachers in primary schools of selected different districts of Uttar Pradesh in Bundelkhand region towards, 2010A.D. The main object of the research has expresed to corelate competency and to established new procedures for exploring new objects.

B-   Nature Of Data

Growth of Primary Schools since 1990-91. Number of primary schools teachers in four selected different districts of U.P.in Bundelkhand region from 1990-91 to 1999-2005. Population 6 to 11 age group in four different districts from 1990-91 To1999-2000. 2001. Enrolment of primary schools students from 1990-91to 1999-2000. School teacher ratio, teacher student ratio, school student ratio and school non-goers from 1990-91 to 1999-2000. Considrable emphasis laid ont he teaching of applicable and modernistic. The matter different educational aspect students are required to learn and seek new ideas and perception.

In the field of primary education considerable reforms and changes have been introduse as a result of researches in the methods of teaching and the influence of psycholigical experiment.

C-   Sources of data

The sources of data are the records and the publications of Bureau of statistics, Uttar Pradesh, District Inspector of schools, Circle Inspector of school, District Satistical Office, Jhansi, Jalaun, Lalitpur and Hamirpur, District primary Educational programme (DPEP) survey report of 2005 and state welfare department. In the schools of various district the daily timing of the schools from begining to ending so every primary school in Bundelkhand region is free to have it own shedule . Educatinal system both the traditional and the new ones, exist side by side.

D- Tools

A proforma was prepared to collect the data on the following dimensions

A-   Year wise strength of primary school teachers,

B-   Year wise population 6 to 11 age group,

c-   Year wise growth of primary schools,

D-   Year wise expansion of student enrolment,

E-   Population

Whole population of Primary teachers, students, schools and population 6 to 11 age group of all four district in Uttar Pradesh districts namely Jhansi, Jalaun, Lalitpur and Hamirpur constituted the population of the study. The object of primary education in Bundelkhand region is to trand the child in all such activities as are needed to make his future life successful.

F-   Data collection procedures

Data collection was made personally by visitingBureau of Statistics, Lucknow, District Statistics Office, Jhansi, Jalaun, Lalitpur and Hamirpur, District Inspector of schools of four districts three times. The investigator collected the information about the year wise teacher strength of primary schools, population 6 to 11 age group number of schools, enrolment of students, school teacher ratio, teacher student ratio, school student ratio since 1990-91 to 1999-2005. Data was collected through scrutiny official records and publications related to the objective-I.

G- Analysis of data

Trend extrapolation method was used considering the nature of objectives like expansion of teachers, trend of growth of population, trend of expansion of schools, trend of expansion of students, in primary Schools of four districts of Uttar Pradesh districts of towards 2010 AD was calculated by least Square method. On the basis of base line data from the year 1990-91 to 1999-2005, the trend expansion of all the above aspects were done. Least square method has been used for trend analysis. The formula of least square method is given below:

Y= a+ bx

Where in

Y= Frequency

a= Sum of y frequencies and divided by number of years.

b= Exy and divided by Ex2

X= Time variable

Above equation was used for calculation of the future trend of expansion of teachers, population, schools students towards 2010 A.D.

A- Objective-II

To explore the present and future needs for in-service education of primary school teachers of four districts of Uttar Pradesh in Bundelkhand region with special reference to teacher competencies. Considerable stress is laid on moral teaching in primary and superior primary school in Bundelkhand region suitable punishment have also been provided for enforcing codes of the disiplane and courtesy but corporial punishment is prohibited₈₉ -

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B- Nature of data

Opinion of in-service primary schools teachers, Headmasters, Headmistress Education administrators, Inspectors of school , DIETs teachers and experts who worked as a resource persons in the field of in-service education.

C- Sources of data

Primary school teachers, Headmasters, Headmistress DIETs teachers and training institute, Lucknow. DPEP primary research cell and Director of State Educational Research and Training

were treated as sources of data.

D- Two questionnaires were developed by the investigator for this objectives -

A- Questionnaire for primary schools teachers on training needs of our districts of Uttar Pradesh in Bundelkhand region

B- Questionnaire for experts on training needs of primary school teachers in four district of Uttar Pradesh in Bundelkhand region.

C- Observation schedule of teacher competencies

3.1 Procedure of Tools Construction:

The Brain storming session were conducted in Jhansi (U.P.) 25experts and 72 teachers who have been working in the areas of Primary Schools in different districts participated in such session. Brain storm is effective in allowing groups of individuals as a whole, to deal with a complex problem, especially related to competencies of Primary school teachers. The ideas were generated and content analysis was

done to identify the core items. The competencies which were not related to the topic were removed from the items list After this work the questionnaire was developed comprising the questions for training needs assessment of in-service teacher in different districts of Uttar Pradesh in Bundelkhand region. The content validity of questionnaire was ascertained on the basis of experts were mainly from the District Institute of Education and Training, Jhansi, Uttar Pradesh, Retired Primary school Headmaster in Jalaun, District. Lectures in Education of B.K.D. college, Jhansi District. Lecturrers of B.ED Training College, Orai,(Jalaun). The tools were Checked and translated in to Hindi and english, by the experts of both the languages.

3.2   Description of tools:

The questionnaire and observation checklist is developed by the Scholar himself. The main features of these tools are discussed further .

A-   **Questionnaires for experts on training needs of primary school teachers.**

B-   **Questionnaire for school teachers on training needs of primary school teachers.**

For preparation of these tools researcher took the help of NCERT project "identification of essential competencies for primary teachers" conducted by **Bhat et. al (1998)** in Regional Institute of Education (Allahabad). After a care full and ideas gathered through brain storming sessions researcher develop the questionnaire for

competence of these report, related studies each of these questionnaires contains two parts which is given further:

A- Background information about experts and teachers: This parts contains name, Sex, Designation, Qualification, school, In-service training attend, Teaching experience.

B- Three point perception scale on existing competencies, Present training needs and further training needs respectively. This part contains 62 items under 12 categories. Each category is described as follows.

Category-I : Preparation for Instruction

A- Plan lesson

B- Identify student learning needs

C- Summarize the lesson

D- Assign home work

Category-II : Development, Preparation and utilization of Instructional Material

A-Prepare teaching aids

B- Utilize text book and manual

C- Utilize black board

D- Utilize teaching aids

E- Demonstrate experiment

F- Utilize community resource

G- Develop learning activities

H- Operate hardware

I- Analysis text book

Category- III : Motivation of children

A- Motivate the student

B- Establish rapport with primary student

C- Manage class room decipline

D- Conduct cultural activities.

E- Motivate student of higher age group

Category- IV : Communication in class room

A- Utilize the techniques of teaching

B- Provide effective feed back

C- Conduct dramatization

D- Recite a poem

E- Narrate a story

F- Conduct role play

G- Undertake multi grade teaching

Category- V : Methods of Instruction

A- Provide experience-based teaching

B- Conduct oral drill exercise

C- Adopt play way method

D- Adopt attainment approach

E- Adopt project method

F- Adopt guided discovery method

G- Adopt inductive deductive method

H- Adopt problem solving method

I- Adopt method to develop creativity

J-   Adopt self instructional techniques

K-   Adopt group discussion method

L-   Implement new educational ideas

M-   Organize competency based teachings

N-   Device and adopt innovative ideas in teaching

Category- VI : Evaluation of learning

A-   Construct appropriate evaluation tools

B-   Conduct continuous and comprehensive education

C-   Assess student condition

D-   Organize Curative instruction

E-   Diagnose students learning difficulties

Category- VII : Diagnose and Remediation

A-   Conduct follow up activities

B-   Organize and conduct guidance activities

Category- VIII : Class-room Management

A-   Manage the learning environment

Category-IX : Co-curricular Activities

A-   Arrange outdoor activities

B-   Conduct sports and games

C-   Utilize the community resource

Category- X : Community Participation

A-   Establish rapport with parents.

B-   Participation of social and cultural activities

Category- XI : Social Education

A-   Provided educational assistance for children

B-   Cater to mixed ability groups

Category –XII : Institutional planning

A-   Develop institutional planning

B-   Maintain records

C-   Work in team spirit

D-   Establish rapport with staff

E-   Undertake self evaluation

F-   Conduct action research

G-   Assist in conducting survey

Open space was also provided for seeking responses of respondent which were not covered in close format of questions Observation check list :The researcher used an observation scale for observation of teacher competencies exhibited in class room and outside classroom situations. The observation scheduled included those items already stated under different categories of competencies of Ist questionnaire. The scale had five points alternatives,The scale content validity was checked by the experts.

3.3 Population and Sample

The population of the study included all the full time trained and untrained primary school teachers in four different districts in Bundelkhand region namely Jhansi, Jalaun, Lalitpur and Hamirpur of Uttar Pradesh Who had under gone in-service education programme.

DIETs teacher and all the resource persons of in-service education programme of Uttar Pradesh. The sample of the present study included Primary schools teachers, DIETs teachers and experts in Uttar Pradesh Random Sample technique was used for selecting the samples. The district wise break of sampling frame read as follows.

A- **All the Primary Schools teacher of Jhansi district constituted the population of the study.**

For sampling the researcher made a list of 300 teachers from 5 blocks of Jhansi district from Directorate records. The researcher had attended the 8 center meetings of primary school teachers and individually distributed the questionnaires who had attended the in-service training programme in DIET. Out of these 100 respondents returned the questionnaires with a breakup of from Jhansi block, 35 from Chirgoan, block, 40 from Gursarai, block and 34 from Moth block. These respondents constituted the sample of the study from Jhansi district.

B- **All the primary schools teachers of Jalaun district constituted the population of the study**

For sampling, the researcher made a list of 350 teachers from 5 blocks of Jalaun district from official records. The researcher had attended the 8 center meetings of primary schools teachers and individually distributed the questionnaires who had attended the in-service training programme in DIET. Out of them 100 block, 28 from Rampur, block, 21 from Nadigoan block and 14 from Kadora block.

These respondents constituted the sample of the study from Jalaun district.

C-   All the primary schools teachers of Lalitpur district constituted the population of the study

For sampling, researcher made a list of 400 teachers from 4 blocks of Lalitpur district from official records. The researcher had attended the 8 center meetings of primary schools teachers and individually distributed the questionnaires who had attended the in-service training programme in DIET . Out of them 100 respondents returned the questionnaires and with a breakup of 37 from Talbehat block, 28 from Mehroni, block, 21 from Jakhlon block and 14 from Madawara. block. These respondents constituted the sample of the study from Lalitpur District.

D-   All the primary schools teachers of Hamirpur district constituted the population of the study

For sampling, researcher made a list of 400 teachers from 4 blocks of Hamirpur district from official records. The researcher had attended 8 center meetings of primary school teachers and individually distributed the questionnaires who had attened the in-service training programme in DIET. Out of them 100 respondents returned the questionnaires with a breakup of 28 from Rath block, 31 from Muskara block, 23 from Kherla block and 18 were Gohand block.These respondents constituted the sample of the study from Hamirpur district.

3.4 Sample Profile :

Table -1
Sample distribution of primary school teachers in four Different Districts of Uttar Pradesh in Bundelkhand region

	Jhansi	Jalaun	Lalitpur	Hamirpur	Total
Gender					242
Male	65	62	55	60	158
Female	35	38	45	40	400
Location					293
Rural	77	80	71	65	107
Urban	23	20	29	35	400
Type					268
Multi-grade	55	72	68	73	132
Mono-grade					
	45	28	32	27	400
Experience					
<2 Years					61
2-5 years	7	15	21	18	99
5-10 years	13	25	35	25	156
>10 years	55	40	29	32	84
	25	19	15	25	400

Total teachers sample Size=400

Experts sample size = 50

Total sample observation 100 teachers

Interpretation :

Primary school teacher have four different districts in Bundelkhand region (Jhansi, Jalaun, Lalitpur and Hamirpur). The table has divided four items Gender, Location, Type and Experience. Gender has divided male and female, location has divided rural and urban, type has divided multigrade and monograde and Experinece has divided <2 years, 2-5 years, 5-10 years and >10 years and each district has resulted 100.

Table-2

Table-2

Sampling distribution Primary school teachers in four Different Districts of Uttar Pradesh in Bundelkand region Block wise information.

Jhansi		Jalaun		Laltpur		Hamirpur	
Name of the block	No of teachers	Name of the block	No of teachers	Name of the block	No of teachers	Name of the block	No of teachers
Chirgoan	24	Rampura	37	Talbehat	28	Hamirpur	29
Gursaria	20	Nadigoan	28	Mehroni	31	Muskara	19
Moth	30	Kadora	21	Madawara	23	Kherala	27
Babina	26	Madogarh	14	Jakhlon	18	Rath	25
Total	100	Total	100	Total	100	Total	100

The total purposive sampling technique was used for identification of experts. The researcher sent 180 questionaries to the experts who were known for their involvement in primary education in the state . The list of the experts was obtained from DIETs organizing in-service teachers education programme in U.P. It included different categories of resource persons, Out of them 50 experts responded to the researcher through several reminders and personal contacts. The breakup of experts in terms of their background reads as:

A- Teachers of two districts District Institute viz. Educations and Training(DIETs) of Jhansi and Jalaun (N=10)

B- Retired Primary Schools Headmasters in four districts of Uttar Pradesh in Bundelkhand region (N=9)

C- School Inspectors (SI) of four disricts of Uttar Pradesh Bundelkhand region (N=6).

D- District Primary Education programme (DPEP) coordinator, Jhansi (N=2).

E- Teacher educators of State Council of Educational Research and Training Lucknow (N=6).

F- Teacher educator of B.K.D. College, Jhansi, Uttar Pradesh (N=5) and Government College of Teacher Education, Jhansi, U.P., (N=4).

G- Missionary schools Headmasters of four Bundelkhand districts of U.P. (N=5)

Interpretation :

Every District (Jhansi, Jalaun, Lalitpur and Hamirpur) to divide four sub-blocks and No. of teachers each block are different. Jhansi Distt. in Month block highest No. of Teachers and lowest Babina Block, Jalaun District highest Rampura Block and Lowest Madhogarh Block, Lalitpur Distt. No. of Teachers highest Talbehat block and lowest Jakhlon block and Hamir distt. highest No. of teachers Hamirpur Block and lowest Muskara block and blocks wise toteling No. of teachers total 100.

A- Data Collection Procedures

Data was collected by post and personally visiting the center meetings of primary schools of four districts of U.P. (Jhansi, Jalaun, Lalitpur & Hamirpur) The sample experts responded to the questionnaires by hand, as well as by mail, as stated earlier ....The school activities of ....teachers were observed for two

consecutive days respectively. Collection of data through review of records and studying different publication of the in-service programme was also treated as a mode of collection of data.

B- Procedures of Analysis

Analysis of the data means studying the tabulated materials in order to determine the inherent facts or meaning. The questionnaires were supplied with alternatives in the form of three points rating scale such as competent, un-certain, not competent and for procession of competencies training needs alternatives. The responses to each item were tallied . After finding out the number of responses for each alternative the chi-square formula for testing hypothesis of independence of responses and training background of teachers were also tasted . In the case of experts responses the chi-square taste of equal appearance of frequencies in different cells were calculated.

These statistics were applied to analyses the data of each item of the present level of training needs and as well as future training needs. The 2x3 contingency table (df=2) had been used for calculation of data obtaining from teachers in the context of their training background .

The equation for chi-square (X2) is stated as follows :

$$X_2 = E\left[\frac{(fo\text{-}fe)^2}{fe}\right]$$

fo= frequency of occurrence of observed or experimentally determined facts.

fe= expected frequency of occurrence of some hypothesis.

The open ended responses were analysis with the help of content analysis technique. The observation data were also analysed with the help of chi-square taste of independence of teaching competencies and training background of teachers. It is worthwhile to note that in the case of observation scale teachers competencies could be notified only up to 3 point level. No teacher were found to be competent at more competent and most competent levels.

C- OBJECTIVE - III

To make assessment of existing in-service teacher education programme available to the primary school teachers through DIETs in terms of reaction of participants teachers and teacher educators.

1. Nature of data :

Reaction of primary school teachers who participated in training programme conducted by DIETs, and reaction of teacher educators of DIETs as experts.

2. Source of data :

Primary schools teachers of four Bundelkhand districts of U.P. who had undergone the in-service training programme.

3. Tools

The data was collected by using the following tools developed by the scholar.

A- Reaction scale for expert on in-service training of teachers.

B- Reaction scale for teachers on in-service training of teachers

To measure reaction of experts and teachers a three point reaction scale was developed by the scholar. The reaction scale was developed taking in to consideration different aspects of in-service education of primary school teachers programme viz,

A- Reaction of expectations from DIET,

B- Adequacy of training activities,

C- Reaction on quality of training programme,

D- Adequacy of venue,

E- Reaction on classroom environment,

F- Adequacy of study materials.

G- Adequacy of laboratory facilities,

H- Adequacy of material available,

I- Adequacy of different methods used ,

J- Adequacy of learning experience,

K- Adequacy of media facilities,

L- Adequacy of resource persons,

M- Adequacy of mechanism and

N- Adequacy of evaluation

The alternatives in the scale were-most adequate, moderate adequate. Moreover place was provided for open ended responses after end of the each item like- any other please specify.

4. Population and Sample :

The population and Sample of the study for this objective remained same as for teachers and experts category included for objective II.

5. Data collection procedures

Similar procedure was adopted for questionnaire survey as stated under objective II

6. Analysis Procedures

The questionnaires were supplied with alternatives in the form of three points reaction scale with adequate, moderate adequate and least adequate.

The responses for each scale were counted . After finding out the number of responses for each scale X2 test were used and calculated the percentage of the each item by computer.

The chi-square test were used for testing different hypothesis. The open-ended answers were analyzed qualitative.

OBJECTIVE – IV

To explore alternative curriculum frame work for in-service teacher education of primary school teachers towards 2010-AD. The findings of objective 1,2, and 3 were used as the basis for development of curriculum design. Interpretative method was used for development of curriculum design. The details of analysis and interpretation of data are presented in Chapters-IV&V.

Chapter- 4

ANALAYSIS AND INTERPRETATION

ANALYSIS AND INTERPRETATION

4.0 INTRODUCTION

Keeping in view the different objectives of the study as stated in the first chapter, this chapter deals with the analysis and interpretation of data.

4.1 OBJECTIVE - I

To forecast the strength of teachers in Primary Schools of selected four district of U.P. viz, Jhansi, Jalaun, Lalitpur and Hamirpur towards 2010 A.D.

As presented in the first chapter the objective is to focus on the strength teachers, population of students of 6 to 11 age group, schools, school teacher ratio, teacher student ratio, school student ratio of Bundelkhand region of primary schools of U.P. towards 2010 A.D. With a view to activate this objective trend extrapolation method was used for analysis of data.

The trend extrapolation and forecasting the numbers of primary schools towards 2010 A.D. has been done through least square method. The data has been analyzed for teachers from 1990-91 to 1999-2000. Student population 6 to 11 age group from 1990-91 to 1999-2000, schools from 1999-91 to 1999-2000, students from 1990-91 to 1999-2000, school teacher ratio from 1990-91 to 1999-2000, teacher student ratio from 1990-91 to 1999-2000, school student ratio from 1990-91 to 1999-2000 to 2000-2005 The forecasting of these aspects has been done through extrapolation of above figures.

4.2 Trend of expansion of primary schools teachers in selected Bundelhand region of Uttar Pradesh

Data regarding the teachers of primary schools from 1990-91 to 1999-2000 and 2000-2001 to 2010 has been presented in table-1

Table-1

Strength of teachers in primary Schools

From 1999-91 to 1999-2000 YEAR	STRENGTH	Forecasted strength of teachers from 2001 to 2010 YEAR	STRENGTH
1990-91	10,675	2000-2001	17,803
1999-92	11,069	2001-2002	18,692
1999-93	11,471	2002-2003	19,307
19993-94	11,956	2003-2004	20,165
19994-95	12,257	2004-2005	20,890
1999-96	11,722	2005-2006	20,756
19996-97	14,617	2006-2007	21,856
1999-97-98	15,824	2007-2008	22,547
19998-99	16,923	2008-2009	25,374
1999-2000	17,695	2009-2010	24,819

Schools 1990-91 to 1999-2000 Baseline data
2000-2001 to 2009-2010 Forecasted by least square method.

Interpretation :

The Table has divided two parts I and II. Ist part has divided 1990-1991 to 2000 and II part 2000-2001 to 2009-2010 and both part have added and total result 94.4199.

It can be observed from *table 1* that the strength of the teachers of primary schools is gradually increasing from 1990-91 to

1999-2000 that is from 9,685 to 16,495 with the help of least square method, the forecast was made up to 2009-2010. It is forecasted that towards 2010, 6424 more teachers will be added to the exciting strength of teachers. The total strength of teachers towards 2009 to 2010 will be 23.9 thousand. The in-service programme will have to expand its scope for accommodating additional 6.4 thousand teachers during the decade.

4.3 Trend of growth of student population under 6 to 11 age group in selected four districts in Bndelkhand region

The forecast of the position of children's population under 6 to 11 age group was done on the basis of trend of 1990-91 to 1999-2000. The forecast has been done towards 2001 to 2010 in this year wise basis. These forecasted figures along with the existing population of 6 to 11 age group has been presented in Table-2

Table -2

Population growth of 6 to 11 age group in selected four districts in Bundelkhand region of U.P.

From 1990-91 to 1999-2000 YEAR	POPULATION	Forecasted 2000-2001 to 2009-2010 YEAR	POPULATION
1990-91	3,93,967	2000-2001	5,41,818
1991-92	4,04,929	2001-2002	5,55,665
1992-93	4,22,896	2002-2003	6,70,250
1993-94	4,38,843	2003-2004	5,64,690
1994-95	4,35,218	2004-2005	5,98,973
1995-96	5,65,012	2005-2006	6,04,425
1996-97	5,80,376	2006-2007	6,18,725
1997-98	4,07,749	2007-2008	7,42,048
1998-99	5,07,844	2008-2009	6,76,808
1999-2000	5,24,188	2009-2010	6,70,809

1990-91 to 1999-2000 Base line data
2000-2001 to 2009-2010 Forecasted by least square method.

Interpretation :

The Table has divided two parts I and II. Each part has related population growth 6 to 11 Age group. Both the part added and find out the result 94,175,175,483.

From Table – 2 it can be observed that the rate of student population growth under 6 to 11 age group in four districts in Bundelkhand region districts was increased up to 4.2 1 in 1999-2000. These forecasted figures in future will reach 5.6 lakh during 2009 to

2010 A.D. The school will have to expand its scope for accommodating 5.6 lakh population during the decade

Table-3

Enrolment of Students in Primary Schools of different districts (Jhansi, Lalitpur, Jalaun, Hamirpur) in Bundelkhand Regiion.

From year	1990-1991 to 1999-200 Enrolment	Forecasted	2000-2001 to 2009-2010 Enrolment
1990-91	2.48,556	2000-2001	5,06,190
1991-92	2,68,758	2001-2002	5,60,210
1992-93	3,70,918	2002-2003	6,70,190
1993-94	2,76,098	2003-2004	5,80,440
1994-95	4,16,215	2004-2005	4,90525
1995-96	4,54,560	2005-2006	6,90,310
1996-97	3,58,680	2006-2007	7,10,411
1997-98	3,60,480	2007-2008	4,14,906
1998-99	3,67,778	2008-2009	5,09,406
1999-2000	3,98,848	2009-2010	5,14,606

1990-91 to 1999-2000 Base Data

2000-2001 to 2009-2010 forecaste by least square method.

Interpretation :

Table 3 has divided two part I and II. In this table the Enrolment of Students in Primary School of Different Districts (Jhansi, Lalitpur, Jalaun & Hamirpur) in Bundelkhand Region. Ist part has total 7,66,626 and IInd part has result 63,57,605 The total result 71,24,231

The bar chart shows enrolment values (y-axis from 10000 to 5²0000) plotted against years from 1990-91 through 2005-2006.
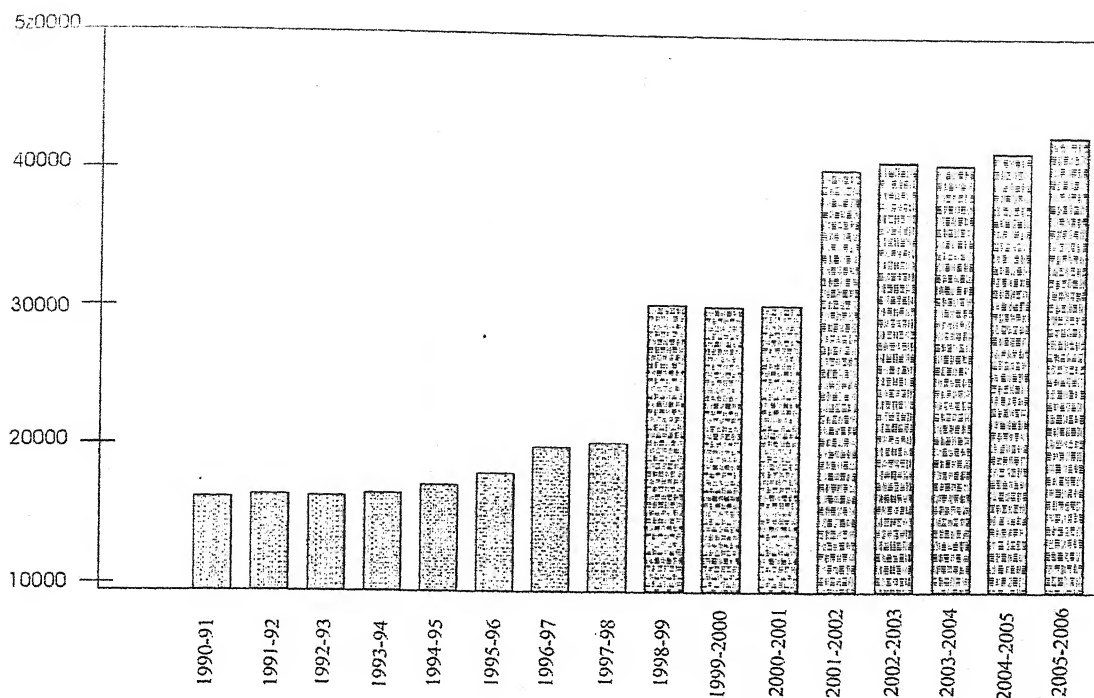
From Table 3, it can be observed that the enrolment of the students which was 2.48 lakh in 1990-91 was increased up to 7.10 lakh during 2010A.D. It can be also observed from Table-3 that there will be an increase of 1.59 lakh students towards 2010 A.D. Accordingly to this, if the ideal student ratio of teacher-student remains as 1:30 there will be additional requirement of 5300 teachers in the in the four district in the Bundelkhand region selected under study

4.4 Conclusion

The above observations on different parameters of different primary schools of Uttar Pradesh like strength of teachers, student population 6-11 age group, number of schools and enrolment of students have indicated increased trend on year wise basis.

The efforts of the Universalisation of Elementary Education (UEE) have progressed and demand for provision of increasing Primary School education, teacher strength in 1999-2000. If this parameter is taken in to account there will be additional strength of teachers of 6.5 thousand during coming decade. Keeping in view the forecasted population of 6-11 years age group children there will be a need for additional strength of teachers of 4.67 teachers. The extrapolation of students figures of students in primary schools indicate there will be an additional requirement for 5.30 thousand teachers towards 2010. However the school extrapolation indicates that there will be a need for additional strength of 4.50 thousand teachers. These figures indicate that towards 2009-10 there will be need for creation of additional posts of teachers with a variation of 4.5 thousand to 6.4 thousands. Of course population forecast indicates the additional teachers positions with a range of 4.67 to 5.30 thousand. Hence the planning is to be made for in-service education of existing strength of 16.50 thousand teachers and additional 4.67 to 5.30 thousand teachers towards 2010. The total intake of teachers for in-service education during 2001-2010 will be approximately 21.17 thousands to 21.80 thousands in the sample districts as per students population parameter. Appropriate inputs need to be provided for in-service education of teachers during this decade.

4.5 OBJECTIVE- II

To explore the present and future needs for in-service education of primary school in Bundelkhand region in Uttar Pradesh.

As stated earlier the three point rating scale was used to study the training needs for in-service education programme. The response to each item was tallied. After finding out the number of responses for each alternative the chi-square values for testing hypotheses of independence are calculated against respective items. Data for each item is presented for competency possessed, present training needs and future training needs. In order to visualize the common needs of the in-service education of primary school teachers, the responses of primary school teachers' experts and researchers observation have been presented for analysis and interpretation respectively.

The levels of significance of chi-square value was tested by matching obtained values with table value of chi-square with df=2. Analysis and interpretation of data have been presented segment wise.

HYPOTHESES

A- Teachers perception towards their possessed competencies and their training background are not significantly independent from each other at .05 level of significance.

B- Teachers perception of present training needs and their training background are not significantly independent from each other at .05 level of significance.

C- Teachers perception of future training needs and their training background are not significantly independent from each other.

As stated earlier the three points rating scale was used to study the competency possessed, present training needs and future training needs for in-service education programme, responses to each item was tailled. After finding out the number of responses for each alternatives the chi-square value were calculated against respective items. Data for each item is presented for competency possessed presented future training needs.

4.6 Teachers perception of teachers competencies and training needs: Preparation for Instruction

Preparation for instruction is the main tools to success of in-service education programme. Data concerning competency, possessed present and future have presented training needs have been presented with respective chi-square value.

TABLE -4
TEACHERS PERCEPTION OF TEACHER COMPETENCIES AND TRAINING NEEDS: PREPARATION FOR INSTRUCTION

Item	Competency possessed					present training needs perceived				Future training Needs perceived			
	Com			UC	NC	X2 value	VMN	FN	LN	X2 value	VMN	FN	LN	X2 Value
Plan lesson	T	110 72.3		29 19.3	11 7.3	58.79 **	34 22.6	64 42.6	52 34.6	26 **	55 (36.6)	93 (62)	2 (1.3)	40.9 5 **
	UT	119 4736		23 9.2	108 43.2		88 35.2	128 51.2	34 13.6		165 66	74 29.6	11 4.4	
Identify ident lessoning needs	T	100 66.6		35 23.3	15 18	23.33 **	55 36.6	63 42	32 21.3	19.40 **	48 32	91 60.6	11 7.32	34 .7 1 **
	UT	116 46.4		60 24	74 29.6		122 48.8	111 44.4	17 6.8		156 62.4	83 33.3	11 4.4	
Summarize The lesson	T	107 71.3		25 16.6	18 12	20.05	32 21.3	82 54.6	36 24	0.93 NS	57 38	66 44	27 18	7 .53 **
	UT	142 56.8		43 17.2	65 26	1.61	51 20.4	148 59.2	51 20.4		74 29.6	145 58	31 12.6	
Assaling	T	166 177.3		18 12	16 10.6	NS	23 15.3	84 56	43 28.6	3.20 NS	40 26.6	80 53.3	30 20	0.
Home work	UT	188 75.2		25 10	37 14.8		48 19.2	117 46.8	85 34		60 24	133 53.2	57 22.8	60 NS

Figure in the parentheses are percentages

** Significant at 0.01 level

*Significant at 0.05 level

- NS Not significant

Note: Comp= Competent, UC = Uncertain, NC = Not competent, VMN = Very much needed

FN = Fairly Needed, LN = Least Needed T = Trained UT = Untrained

Interpretation :

Table 4 has divided 4 parts. No. 1 Item, No. 2 Competency Possessed, No. 3 present Trainng Needs Perceived and No. 4 Future Training Needs perceived. There are two type of errors find out in the table human error and sampling error. To apply chi square test and to corelate df (Degree of Freedom for Smaller variance) and find out the results.

From Table 4 it can be observed that null hypothesis of no significant independence was rejected at .01 level of significance on possessed competencies of trained and untrained teachers on the following items concerning preparation for instruction:

A- Planning a lesson

B- Identifying student learning needs

C- Summarizing

Only in the case of assign homework to students the response pattern of trained and untrained teachers were found to be not independent.

It can further be noticed that a large majority of trained teachers i.e. 67% to 77% stated that they were competent in different aspects of the competency of preparation for instruction, where as in

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the case of untrained teachers only 46% to 48% of them stated about possessing competency on planning a lesson and identifying students' learning need. Hence, majority of untrained teachers were found to be either not competent or uncertain about their competencies unlike their trained teacher counterparts. In the case of summarize the lesson around 43% of untrained teachers were either incompetent or uncertain about possession of competency in this regard. These facts needed to be correlated with the training needs of untrained teachers. From table 4 it can be observed that the null hypothesis of no significant independence regarding the perception of training needs by trained and untrained teachers on competencies viz. Planning a lesson and identify of student learning needs was rejected at. 01 level. While in the case of summarize the lesson and assigning homework the response pattern of trained and untrained teachers was found to be not independent significantly. From the same table it can be observed that the trained as well as untrained teachers perceived training needs in all the four competencies. In the case of item 1 and 2 viz. Planning a lesson and identify of student learning needs untrained teachers stated that they have greater needs of training i.e. 86 to 93% than their trained teacher counterparts i.e. 65 to 75%. In the case of other competencies both trained and untrained teachers showed response pattern regarding needs for training in these competencies. It can be observed that most of the trained teachers i.e. 71 to 76% as well as most of untrained teachers i.e. 66 to 75% perceived either very much or fair need of in-service training. The future training

needs of these teachers need to be analyzed to link it with possessed competencies and present training needs. From the same table it can also be observed that the null hypothesis of no significant independence was rejected at. 01 level of significance on perception of training needs for futures training of trained and untrained teachers on two competencies viz planning a lesson and identify student learning needs. Most of the untrained teachers i.e. 62 to 66% perceived future training needs while only 32 to 36% of trained teachers perceived it has very much needed. Collectively most of the trained and untrained teachers (92 to 98%) perceived the future needs for training regarding these competencies either very much or fairly needed. The null hypothesis of no significant independence was rejected at .05 level of significance on perception of future training needs in the areas of summarize a lesson by trained and untrained teachers. In this case, untrained teachers expressed greater need for training in future i.e. 87% than their trained teacher counterparts i.e. 82% In case of assign homework most of the trained as well as untrained teachers (77 to 79%) perceived the future training needs either very much needed or fairly needed.

4.7 Experts perception of teacher competencies and training needs of teachers: *preparation for instruction*

Preparation for instruction is the main tools to success of in-service training programme. Data concerning competency possessed present and future training needs have been presented with respective chi-square value.

TABLE 5

EXPERTS PERCEPTION OF TEACHER COMPETENCIES AND TRAINING NEEDS OF TEACHERS:
PREPARATION FOR INSTRUCTION

Item		Competency possessed				Present Training Needs Perceived				Future Training Needs perceived			
		Com	UC	NC	X2 Value	VMN	FN	LN	X2 Value	VMN	FN	LN	X2 Value
Plan-Lesson UT	T	36	11	3	35.57	28	17	5	22.8	33	15	2	29.08
	UT	72	22	6	**	56	34	10	**	66	30	4	**
Identify Student Learning UT Needs	T	40	7	3	49.49	38	8	4	45.45	38	8	4	41.45
	UT	80	14	6	**	76	16	8	**	76	16	8	**
Summaris The lesson	T	16	15	19	0.50	22	16	12	3.03NS	18	17	15	7.19
	UT	32	30	38	NS	44	32	24		36	34	30	*
Assigning Home Work	T	25	8	17	15.6	14	18	18	0.62	23	15	12	3.87
	UT	50	16	34	**	28	36	36	NS	46	30	24	NS

Figure in the parentheses are percentages

- * *Significant at .0.01 level
- *Significant at 0.05 level
  NS = Not significant

Note: Comp = Competent, UC = Uncertain , NC = Not competent
VMN = Very much needed, FN = Fairly needed , LN = Least Needed.

Interpretation :

Table 5 has described 4 item and to divide trained and untrained teachers and the totalling trained and untrained teachers 100.

From table -5 it can be observed that the null hypothesis of equal appearance of expert's opinion on competencies of teachers

was rejected in the case of planning lesson, identifying student learning needs and assigning homework. In these cases of item i.e. summaries the lesson only 32% experts stated about competency possessed by the teachers.

From the same Table it can be observed that in the case of planning lesson and identifying student learning needs

TABLE -6
RESEARCHERS' RATING OF TEACHING COMPETENCES OF TEACHER'S TRAINING BACKGROUND WISE: PREPARATION FOR INSTRUCTION

Item	Trained				Untrained				
	2	1	0	Total	3	2	1	Total	X2 value
Plan lesson	18 72	6 24	01 04	25	10 40	05 20	10 40	25	9.74 **
Identify Student Learning needs	15 60	08 32	02 08	25	11 44	04 16	10 40	25	7.28 **
Summarize The lesson	17 68	07 28	01 04	25	09 36	07 28	09 36	25	8.86 *
Assigning Home work	19 76	04 16	02 08	25	12 48	10 40	03 12	25	4..35 NS

Figure in the parentheses are percentages

- ** Significant at 0.01 level
- * Significant at 0.05 level

NS Not significant

Note : 2=Average, 1=Below Average , 0 = Negligble

Interpretation :

Table No. 6 has divided 2 parts trained and untrained teachers and 4 item to find out the results 100.

From Table 6 it can be observed that their existed independence of significant teacher competency and training background at .01 level of significant in the case of planning lesson (01 level), identify student learning needs (.05level) and summarizing the lesson (.05 level) In these cases a large majority of untrained teacher (56 to 64%) was found to be either incompetent or below average level competency where as a large majority of trained teacher (60 to 72%) were found to be average level of competency. In the case of assigning homework the level of competency was not independent of training background of teacher at significant level.

4.8 Teachers perception of teacher competencies and training needs:Development, Preparation and Utilization of Instructional Material

In-service training programme Development, Preparation and Utilization of Instructional materials concerning competency possessed, present and future training needs have been presented with respective chi-square value.

TABLE-7

TEACHER PERCEPTION TEACHER COMPETENCIES AND TRAINING NEEDS :
DEVELOPMENT, PREPARATION AND UTILISATION OF INSTRUCTIONAL MATERIALS

Item		Competency possessed				Present training needs Perceived				Future training needs Perceived			
		Comp	UC	NC	X^2 Value	VMN	FN	LN	X^2 Value	VMN	FN	LN	X^2 Value
Prepare teaching aid	T	132 (88)	10 (6.6)	8 (5)	86.50 **	27 (18)	89 (59.3)	34 (22.6)	31.19 **	48 (32)	95 (63)	7 (4.6)	13.70 **
	UT	111 (44)	34 (13)	105 (42)		102 (40.8)	128 (21.7)	20 (8)		125 (50)	111 (44)	14 (5.6)	
Utilize Text book And manual	T	10 (93)	5 (3.3)	5 (3.3)	48.14 **	32 (21.3)	66 (24)	52 (34.6)	1.90 NS	80 (26)	98 (65)	12 (8)	15.70 **
	UT	156 (62)	20 (8)	74 (29.6)		91 (36.4)	136 (54.4)	23 (9.27)		114 (45)*	127 (50)	9 (3.6)	
Utilize Black board	T	145 (96)	2 (1.3)	3 (2)	11.53 **	50 (33.3)	75 (50)	25 (16.6)	1.63 NS	39 (26)	86 (57)	25 (16)	5.97 NS
	UT	216 (86)	20 (8)	14 (5.6)		99 (39.6)	83 (33.2)	68 (27.2)		94 (37)	125 (50)	31 (12)	
Utilize Teaching aids	T	110 (73)	32 (21)	8 (5.3)	20.56 ** .	27 (18)	84 (56)	39 (26)	0.81 NS	50 (33)	82 (54)	80 (12)	0.82 NS
	UT	168 (67)	31 (12)	51 (20.4)		65 (26)	131 (52.4)	54 (21.6)		88 (35)	139 (55)	23 (9.2)	
Demons-Trate experiment	T	118 (78)	18 (12)	14 (9.3)	37.71 **	32 (21.3)	84 (56)	34 (22.6)	4.12 NS	64 (42)	68 (45)	18 (12)	6.84 NS
	UT	119 (47)	66 (26)	65 (26)		63 (25.2)	150 (60)	37 (14.8)		80 (32)	147 (48)	23 (9.2)	
Utilize Community resource	T	116 (77)	18 (12)	16 (10.6)	67.99 **	34 (22.6)	71 (47.3)	45 (30)	3.02 NS	61 (40)	62 (41)	27 (18)	9.46 NS
	UT	88 (35)	63 (25)	99 (39.6)		51 (20.4)	125 (50)	74 (29.6)		65 (26)	125 (50)	60 (24)	
Develop Learning activities	T	66 (44)	50 (33)	34 (22.6)	14.52 **	39 (26)	100 (66.6)	11 (7.3)	3.18 NS	105 (70)	40 (26)	5 (3.3)	29.90 **
	UT	68 (27)	88 (35)	94 (37.6)		91 (36.4)	142 (56.8)	17 (6.8)		111 (44)	136 (54)	3 (1.2)	
Operate Hard ware	T	100 (66)	27 (18)	23 (15.3)	1.30 NS	43 (28.6)	71 (47.3)	36 (24)	22.26 **	55 (36)	68 (45)	27 (18)	1.49 NS
	UT	165 (66)	37 (15)	48 (19.2)		60 (24)	93 (87.2)	97 (38.8)		77 (30)	122 (48)	51 (20)	
Analysis Text book	T	116 (77)	23 (15)	11 (7.3)	32.09 ** .	34 (27.6)	98 (65.3)	18 (12)	17.88 **	36 (24)	84 (56)	30 (20)	46.39 **
	UT	128 (51)	51 (20)	71 (21.4)		68 (27.2)	165 (66)	17 (6.8)		119 (47)	125 (50)	6 (2.4)	

The parentheses are percentages

- ** Significant at .0.01 level
- * Significant at 0.05 level

  NS Not significant

Note : 2=Average, 1=Below Average , 0 = Negligble

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Interpretation :

Table No.7 has 9 item. The table has divided 3 parts and to apply chi square table and find out the result.

From Table 7 it can be observed that their existed independence of significant teacher competency and training background at .01 level of significant in the case of planning lesson (01 level), identify student learning needs (.05level) and summarizing the lesson (.05 level) In these cases a large majority of untrained teacher (56 to 64%) was found to be either incompetent or below average level competency where as a large majority of trained teacher (60 to 72%) were found to be average level of competency. In the case of assigning homework the level of competency was not independent of training background of teacher at significant level.

4.9 Teachers perception of teacher competencies and training needs: Development, Preparation and Utilization of Instructional Material

In-service training programme Development, Preparation and Utilization of Instructional materials concerning competency possessed, present and future training needs have been presented with respective chi-square value.

TABLE -8

Teachers perception teacher competencies and training needs: Development, Preparation and Utilization of instructional materials

Item	Competency possessed	Comp	UC	NC	X2 value	VMN	FN	LN	X2 value	VMN	FN	LN	X2 value
Prepare Teaching Aids	T	132 88	10 6.6	8 5	86.50 **	27 18	87 59.3	34 22.6	31.19 **	48 32	95 63	7 4.6	13.70 **
	UT	111 44	34 13	105 42		102 40.8	128 21.7	20 8		125 50	111 44	14 5.6	
Utilize Text book And manual	T	1.0 93	5 3.3	5 3.3	48.14 **	32 21.3	66 24	52 34.6	41.35 **	40 26	98 65	12 8	15.70 **
	UT	156 62	20 8	74 29.6		91 36.4	136 54.4	23 9.27		114 45	127 50	9 3.6	
Utilize Black board	T	145 96	2 1..3	3 2		50 33.3	75 50	25 16.6	12.16	39 26	86 57	25 16	5.97 NS
	UT	216 86	20 8	14 5.6	11.53 **	99 39.6	83 33.2	68 27.2	**	94 37	125. 50	31 12	
Utilize Teaching Aids	T	110 73	32 21	8 5.3	20.56 .**	27 18	84 56	39 26	3.61	50 33	82 54	80 12	0.82 NS
	UT	168 67	31 12	51 20.4		65 26	131 52.4	54 21.6	NS	88 35	139 55	23 9.2	
Demonstrate Experiment	T	118 78	18 12	14 9.3	37.71 **	32 21.3	84 56	34 22.6	4.11 NS	64 42	68 45	18 12	6.84 NS
	UT	119 47	66 26	65 26		63 25.2	150 60	37 14.8		80 32	147 48	23 9.2	
Utilize Community resource	T	116 77	18 12	16 10.6	67.99 **	34 22.6	71 47.3	45 30	34.10 **	61 40	62 41	27 18	9.46 NS
	UT	88 35	63 25	99 39.6		51 20.40	125 50	74 29.6		65 26	125 50	60 24	
Develop Learning activities	T	66 44	50 33	34 22.6	14.52 **	39 26	100 66.6	11 7.3	4.66 NS	105 70	40 26	5 3.3	29.90 **
	UT	68 27	88 35	94 37.6		91 36.40	142 56.8	17 6.8		111 44	136 54	3 1.2	
Operate Hardware	T	100 66	27 18	23. 15.3	1.30 NS	43 28.6	71 47.3	36 24	9.31 NS	55 36	122 48	51 20	1.49 NS
	U	165 66	37 15	48 19.2		60 24	93 87.2	97 38.8		77 30	84 56	30 20	46.39 **
Analysis Text book	T	116 77	23 15	11 7.3	32.09	34 27.6	98 65.3	38.8 18	9.99	36 24	84 56	30 20	
	U	128 51	51 20										

Figure in the parentheses are percentages

**Significant at 0.01 level
*Significant at.0.05 level .
NS Not significant

Note : Comp = Competent, UC = Uncertain, NC = Not competent, VMN = Very much needed,

FN = Fairly needed LN = Least needed, T = Trained , UT = Untrained

Interpretation :

Table No. 8 has divided 9 items and each item has divided trained and untrained teachers and find out the results chi square test.

From Table 8- it can be observed that the null hypothesis of no significant independence was rejected at .01 level of significance on possessed competencies of trained and untrained teachers on the following items concerning Development preparation and utilization of instructional material, such as :

A-   Prepare teaching aids

B-   Utilize text book and manuals

C-   Utilize teaching aids

D-   Utilize black board

E-   Demonstrate experiment

F-   Utilize community resources

G-   Develop learning activities and

H-   Analyze text book

Only in the case of operate the hardware the response pattern of trained and untrained teachers were found to be not independent. Most of the trained as well as untrained teachers (66%) stated that they were competent in this regard. It can further be noticed

that a large majority of trained teachers i.e. 68 to 97% stated that they were competent in all the competencies concerning development preparation and utilize of instructional materials. Where as most of untrained teachers (56 to 73%) stated that they were either not competent or uncertain regarding four competencies namely :

A-   Prepare teaching aids

B-   Demonstrate experiments

C-   Utilize community resource

D-   develop learning activities

While in other competencies namely :

A-   Utilize text books and manuals

B-   Utilize black board

C-   Utilize teaching aids

D-   Operate hardware

E-   Analysis text books

Most of the untrained teachers (51% to 86%) stated that they possessed

These facts need to be correlated with the training needs of untrained teachers. From table 8 it can also be observed that the null hypothesis of no significant independencies 1 to 7 and 9 respectively viz.

A-   Prepare teaching aids

B-   Utilize text books and manuals

C-   Utilize black board

D-   Utilize teaching aids

E- Demonstrate experiments

F- Develop learning activities

G- Utilize community resources

H- Analyzed text-book

Were rejected at.01 level. While in the case of utilize teaching aids, demonstrate experiments and develop learning activities the response patterns of trained and untrained teachers were found to be not independence In these cases most of the trained as well as untrained teachers (74% to 94%) expressed their very much needs or fair needs for in-service in the cases of utilize blackboard, utilizing community resources, operate hardware most trained teachers (70% to 84%) as well as untrained teachers (61 to 73%) perceived either very much or fair need for in-service training. In the case of preparing teaching aids, utilize text books and manuals and analyzing text books most of the trained teachers perceived greater needs in-service training (91% to 93%) than their trained counterparts (65% to 85%). The future training needs of these teachers need to be analyze and to be linked with possessed competencies and present training needs. From the same table it can be observed that null hypothesis of no significant independence was rejected at. .01 level of significance on conception of training needs for future of trained and untrained teachers on the competencies viz. prepare teaching aids, utilize text books and manuals, utilize community resources, develop activities and analyze text books. While in the case of utilize blackboard, utilize teaching aids and operate the hardware the response pattern of trained and untrained teachers

were found to be not independent. In these cases most of the trained as well as untrained (82% to 91%) teachers perceived either very much or fair needs for in-service training needs in future than their trained teacher counterparts (80%) in the case of analyse text book most of the trained teachers much stronger needs for in-service training in future (98%) perceived greater needs for in-service training in future than their trained teacher counterparts (88%). In the case of utilize blackboard, utilize teaching aids and operating hardware the most of trained as well as untrained teachers (88% to 91%) perceived future training needs either at very much or fair level. As a whole one can see that most of the trained as well as untrained teachers perceived the present as well as future needs for in-service training in all the competencies related to development preparation and utilize of instructional materials.

4.10 Experts perception of teacher competencies and training needs of teachers: Development, preparation and Utilization of instructional materials

In-service training programme development, preparation and utilization of instructional materials concerning competency possessed, present and future training needs have been presented with respective chi-square value.

TABLE-9
Experts perception of teacher competencies and training needs of teachers : Development, preparation and utilization of instructional materials

Item	Competency possessed				Present training needs Perceived				Future training needs Perceived			
	Comp	UC	NC	X^2 Value	VMN	FN	LN	X^2 Value	VMN	FN	LN	X^2 Value
Prepare teaching aid	26 (52)	12 (24)	12 (24)	7.83 *	32 (64)	13 (26)	5 (10)	23.08 **	30 (60)	16 (32)	4 (8)	20.32 **
Utilize Text book & manual	26 (52)	21 (42)	3 (6)	17.56 **	29 (58)	18 (36)	3 (6)	20.44 **	31 (62)	17 (34)	2 (4)	32.17 **
Utilize Black board	26 (52)	7 (14)	17 (34)	17.76 **	22 (44)	18 (36)	10 (20)	4.47 NS	30 (60)	12 (24)	8 (16)	16.48 **
Utilize Teaching aids	32 (64)	12 (24)	6 (12)	22.24 **	23 (64)	15 (30)	3 (6)	25.48 **	34 (68)	13 (26)	3 (6)	30.04 **
Demons-Trate experiment	29 (58)	19 (38)	2 (4)	23.36 **	30 (60)	17 (34)	3 (6)	28.81 **	28 (56)	19 (38)	3 (6)	19.23 **
Utilize Community resource	26 (52)	19 (38)	5 (10)	13.71 **	32 (64)	15 (30)	3 (6)	25.48 **	25 (50)	22 (44)	3 (6)	17.08 **
Develop Learning activities	26 (52)	18 (36)	6 (12)	12.15 **	40 (80)	8 (16)	2 (4)	50.09 **	40 (80)	5 (10)	5 (10)	49.09 **
Operate Hard ware	26 (52)	13 (26)	11 (22)	7.95 *	21 (42)	19 (38)	10 (20)	4.11 NS	20 (40)	18 (36)	12 (24)	2.06 NS
Analysis Text book	17 (34)	30 (60)	3 (6)	28.81 **	30 (60)	17 (34)	3 (6)	28.51 **	14 (28)	30 (60)	6 (12)	17.92 **

Figure in the parentheses are percentages

**Significant at 0.01 level

*Significant at 0.05 level

NS= Not significant

Note Comp = Competent, UC = Uncertain, NC = Not competent, VMN = very much needed,

FN = Fairly needed, LN = Least needed.

Interpretation :

Table No. 9 has 4 items and its possesd teachers competency and to divide traind and untrained teachers and find out the results by chi square methods.

From Table 9 it can be observed that the null hypothesis of equal appearance of experts opinion on competencies of teachers was rejected at .01 level in the case of teachers utilize text book and manual, utilize the black board, utilizing the teachings aids, demonstration experiments, utilize the community resources, development of learning

activities and analysis of text book. while in the case of preparation teaching aids and operation hardware the null hypothesis was rejected at .05 level . In all these cases expects analysis of textbooks 52% to 58% of experts stated that in total teachers were competent ones. In the case of analysis of textbook only 34% experts stated the teachers possessed that such competency. From the same table it can be observed that there was significant variation of frequencies an opinion of experts in the case of needs for in-service training in the areas of utilize the blackboard development of learning activities and operating hardware. However as a whole it was noticed that while 42% to 44% of the experts perceived very much need for training in utilizing the blackboard and operating hardware. In the case of rest seven areas a large majority of experts (58% to 80%) perceived training needs for teachers either at fair level or very high level. Similar expression of experts was noticed

with regard future training needs of schoolteachers. In the case of analysis of textbook only 28% of experts perceived future training needs as very much needed. In rest of the cases large number of experts (40% to 80%) perceived future training need of teachers either at fair level or very high level.

4.11- **Researcher's rating of teaching competencies of teachers training background wise: development preparation and utilization of instructional material**

In-service training programme Development preparation and utilization of instructional materials concerning competency possessed, present and future training needs have been presented with respective qui-square value.

TABLE -10

Researcher's rating of teaching competencies of teacher's training background wise : Development, preparation and utilization of instructional materials

Item	Trained				Untrained				
	2	1	0	Total	2	1	0	Total	X2 value
Prepare teaching aids	15 60	8 32	2 08	25 100	9 36	05 20	11 44	25 100	8.42
Utilize text book and manual	19 76	4 16	2 08	25 100	10 40	12 48	3 12	25 100	6.99 *
Utilize black board	20 80	4 16	1 04	25 100	13 52	10 40	2 08	25 100	4.39 NS
Utilize teaching aids	11 44	10 40	4 16	25 100	5 20	7 28	13 52	25 100	7.54 *
Demonstrate experiment	7 28	8 32	10 40	25 100	4 16	6 24	15 60	25 100	2.10 NS
Utilise community resource	10 40	12 48	3 12	25 100	6 24	9 36	10 40	25 100	5.20 NS
Develop learning activities	6 24	10 40	9 36	25 100	5 20	10 40	10 40	25 100	0.14 NS
Operate hardware	7 28	10 40	8 32	25 100	4 16	6 24	15 60	25 100	3.95 NS
Analysie text book	5 20	5 20	15 60	25 100	3 12	4 16	18 72	25 100	0.88 NS

Figure in the parentheses are percentages

- ** Significant at 0.01 level
- *Significant at 0.05 level
- NS Not significant

Note 2 – Average, 1 – Below Average, 0-Negligible

Interpretation :

Table No. 10 has divided 9 items and trained and untrained teachers and find out the results chi square test.

From table- 10 it can be observed that the existed independence of significant teacher competency and training background at .05 level of significance level in the case of preparing teaching aids, utilizing textbook and manual, utilizing the teaching aids. In this case a majority of untrained teacher (64 to 80%) were found to be either below average or negligible level of competency where as a sizable number of trained teachers (60 to 76%) were found to be average level of competency. In the other case of utilizing the background, demonstrating experiments, utilizing the community resource, developing learning activities and analyzing the textbook the level of competency was not independent of training background of teacher at significant level.

4.12 Teachers perception at teacher competencies and training needs: Motivation of children

Motivation of children is very essential in school education system. In In-service training programme motivation of children concerning competency possessed, present and future training needs have been presented with respective chi-square value.

TABLE -11
Teachers perception at teacher competencies and training needs : Motivation of children

Item	Competency Possessed					Present training needs perceived				Future		
		Comp	UC	NC	X2 value	VMN	FN	LN	X2 value	VMN	FN	LN
Motivate the student	T	125 83.3	9 6	16 10.6	10.05 **	48 32	62 41.3	40 26.6	18.59 **	39 26	100 66.6	11 7.3
	UT	173 69.2	32 12.8	45 18		108 40.2	116 46.4	26 10.4		125 150	111 44.4	14 5.6
Establish rapport with primary student	T	114 76	22 14.6	14 9.3	82.18 **	40 26.6	67 44.6	43 28.6		59 39.3	66 44	25 16.6
	UT	82 32.8	57 23	111 44.4		71 28.4	128 51.2	51 20.4	3.65 NS	82 32.8	134 56.6	34 13.6
Manage classroom discipline	T	130 86.6	15 10	5 3.3	11.62 **	36 24	69 46	45 30		64 42.6	54 36	32 21.3
	UT	230 92	6 2.4	14 5.6		60 24	116 46.4	74 29.6	0.01	71 28.4	131 52.4	48 19.2
Conducting cultural activities	T	120 80	25 16.6	5 3.3	14.29 **	32 21.3	91 60.6	27 18	2.46 NS	57 38	66 44	27 18
	UT	185 74	28 11.2	37 14.8		71 28.4	139 55.6	40 16		105 42	114 45.6	31 12.4
Motivating student of higher age groups	T	110 73.3	30 20	10 6.6	42.40 **	27 18	78 52	45 30	11.22 **	52 34.6	68 45.3	30 20
	UT	119 47.6	43 17.2	88 35.2		71 28.4	136 54.4	43 17.2		82 32.8	134 53.6	34 13.6

Figure in the paraentheses are percentages

- **Significant at .0.01 level
- *Significant at 0.05 level
- NS Not significant

Note Comp = Competent, UC = Uncertain , NC = Not competent, VMN very much needed

FN = Fairly needed, LN = Least needed, T=Trained, UT = untrained

Interpretation :

Table No. 11 has divided five item and competency has divided trained and untrained teachers. Table has related the chi square method and to onbtained results.

From table 11 it can be observed that the null hypothesis of no significant independence was rejected at .01 level of significant on possessed competencies of trained and untrained teachers on the following items concerning motivation of children:

A- Motivation the student

B- Establish rapport with primary student

C- Managing classroom discipline

D- Concluding cultural activities

E- Motivating student of higher age groups

It can further be noticed that a large majority of trained teachers i.e. 73% to 87% stated that they were competent in all the competencies concerning motivation of children. where as in the case of untrained teachers only 33% to 48% of them stated about possession of competencies on establishing rapport with primary student and motivating students of higher age groups. Hence, majority of untrained teachers were neither competent nor uncertain about their competencies unlike their trained teacher counterparts in all these cases.

These facts needs to be correlated with the training needs of untrained teachers. From table 11 it can be observed that the null hypothesis of no significant independence regarding the perception of

training needs by trained and untrained teachers on competencies like motivating the students and motivating students of higher age group was rejected at .01 level. In the case of establishing rapport with tribal student managing classroom discipline and conducting cultural activities the response pattern of trained and untrained teachers were found to be not significant ly independent from each other. From table 11 it can also be observed that most of the trained as well as untrained teachers (70% to 90%) perceived very much need or fair needs for in-service training in all the five competencies. The future training needs of these teachers should to be analyzed and to be linked with possessed competencies and present training needs. From the same table it can be observed that the null hypothesis of no significant independence was rejected at.01 levelof significance on perception of training needs for future of trained and untrained teachers on the competencies viz. motivating the student and managing classroom discipline most of the untrained teacher (80% to 94%) perceived future needs of training regarding these competencies as very much and fairly needed. Of course among 26% to 42% of trained teachers perceived it very much needed. Collectively, both i.e. trained and untrained teachers perceived the future needs for training regarding these competencies either very much or fairly needed (81% to 94%). The null hypothesis of not significant independence was rejected at .05 level on perception of future training needs in establishing rapport with tribal students, conducting cultural activities of motivating student of higher age groups by trained as well

as untrained teachers. In this case most of untrained teachers expressed greater needs for training in future i.e. (86% to 88%) than their trained counterparts i.e. 80% to 83%.

4.13 Experts perception of teacher competencies and training Needs of teachers: Motivation of children

Motivation of children is very essential in school education system. In in-service training programme motivation of children concerning competency possessed present and future training needs have been presented with respective qui-square value.

TABLE – 12

Experts perception of teacher competencies and training needs of teachers : Motivation of children

Item	Competency Possessed				Present Training needs perceived							
	Comp	UC	NC	X2 value	VMN	FN	LN	X2 value	VMN	FN	LN	X2 value
Motivate the student	40 80	7 14	3 6	49.49 **	30 60	14 28	6 12	17.92 **	35 70	10 20	5 10	31 **
Establish rapport with primary student	22 24	19 38	9 18	5.55 NS	21 42	21 42	8 16	6.76 *	22 44	15 30	13 26	2.67 NS
Manage classroom discipline	20 40	22 44	8 16	6.87 *	21 42	42 42	8 16	6.76 *	22 44	15 30	13 26	2.67 NS
Conduct Cultural activities	23 46	22 44	5 10	12.26 **	25 50	17 34	8 16	15.6 *	25 50	17 34	8 16	11.2 *
Motivate Student of higher Age group	11 22	22 44	17 34	10.56 **	23 46	198 38	8 16	7.23 **	28 56	16 32	6 12	14.55 **

**Significant at 0.01 level

*Significant at.0.05 level

NS = Not significant

Note Comp = competent, UC = Uncertain, NC= not competent, VMN = very much needed,

FN= Fairly needed .LN= Least needed.

Interpretation :

Table No. 12 is Focused motivation of children and its Table has divided 5 items and to find out the results chi square table.

It can be observed from table 12 that the null hypothesis of equal appearance of experts students, conduct cultural activities and motivate student of higher age groups. While in the case of manage the classroom discipline the null hypothesis was rejected at .05 levels.

In the cases of motivate students, most of the experts (80%)stated that teachers were competent ones. While in the other cases only 22% to 46% experts perceived about teachers possessing these competencies.

From the same table it can be observed that in the case of teachers motivate the students most of the experts (60%) perceived very much need of training in the for teachers. In the case of teachers establish rapport with primary student, manage the class room discipline, conduct cultural activities and motivate the higher age group large majority of experts (84%) perceived about teachers possessing theses competencies. From the same table it can be observed that in the case of teachers motivate the students most of the experts (60%) perceived very much needs of training in the for teachers. In the case of teachers establish rapport with primary student, manage the classroom discipline,

conduct cultural activities and motivate the higher age group large majority of experts (84%) perceived training needs for teachers either at very much or fairly needed level. Similar expression of experts was noticed with regard to future training needs of school teachers.

4.14 Researcher's rating of teaching competencies of teachers training background wise: Motivation of children

Motivation of children is very essential in school education system In in-service training programme motivation of children concerning competency possessed, present and future training needs have been presented with respective chi-square value.

TABLE 13
Researcher's rating of teaching competences of teacher's training background wise motivation of children

Item	Trained				Untrained				
	2	1	0	Total	2	1	0	Total	X2 value
Motivate the student	11 44	10 40	4 16	25 100	13 52	10 40	2 8	25 100	0.83 NS
Establish rapport with tribal student	9 36	10 40	6 24	25 100	12 48	10 40	3 12	25 100	1.43 NS
Manage classroom discipline	5 20	10 40	10 40	25 100	10 40	9 36	6 24	25 100	2.72 NS
Conduct cultural activities	6 24	11 44	8 32	25 100	13 52	9 36	3 12	25 100	5.05 NS
Motivate student of higher age groups	9 36	10 40	6 24	25 100	11 44	10 40	4 16	25 100	0.60 NS

Figures in the parentheses are percentages

Significant at .01 level
Significant at .05 level
NS Not significant
Note - 2 Average , 1- Below Average, 0- Negligible

Interpretation :

Table No. 13 has divided 5 item and to centralize trained and untrained teachers and to find out the results chi square methods.

The school observation data reveals that motivating the student, establish rapport with primary student, managing the classroom discipline conducting cultural activities and motivating the higher age groups regarding teacher competence in motivation of children. Training background and possesses competencies were not significantly independent to each other. In these cases it was observed that (40 to 44%) of training and (32 to 40%) of trained teachers were possessing below average competencies in all five components of competencies on motivation on children .It was also observed that a sizable number of trained teacher (16 to 40%) as well as (8 to 24%) of untrained teacher had negligible competencies in this area. In the case of (22 to 36%) of trained teachers as well as (42 to 52 %) untrained teachers possessed average level of competencies in all the components of motivation of children. Since a large majority of trained and untrained teacher on these area, are of poor standards special emphasis may be given in service training programme.

4.15 Teachers perception at teacher competencies and Training needs : Communication in class room

For good education communication in classroom is inhabitable factor. In in-service training programme communication in classroom concerning competency possessed present and future training needs have been presented with respective Chi-square value.

TABLE – 14
Teachers perception at teacher competencies and training needs :Communication in classroom

Item	Competency Possessed	Comp	UC	NC	X2 value	Present training needs perceived VMN	FN	LN	Future training needs perceived X2 Value	VMN	FN	LN	X2 value
Utilize the technique of teaching	T	120 80	16 10.6	14 9.3	13.38 **	34 22.6	61 40.6	55 36.6	28.95 **	39 26	93 62	18 12	30.02 **
	UT	168 67.2	22 9	60 24		82 32.2	134 53.6	34 13.6		134 53.6	102 40.8	14 5.6	
Provide effective Feed back	T	106 70.6	27 18	17 11.3	25.84 **	34 22.6	89 59.3	27 18	15.02 **	45 30	73 48.6	32 21.3	14.80 **
	UT	125 50	43 17.2	82 32.8		77 30.8	150 60	23 9.2		85 34	145 58	20 8	
Conducted dramatization	T	98 65.8	50 3.33	2 1.3	52.08 **	32 21.3	50 39.3	59 39.3	29.57 **	45 30	85 56.6	20 13.3	13.6 **
	UT	122 48.38	51 20.4	77 30.8		94 37.6	116 46.6	40 16		119 47.6	97 38.8	34 13.6	
Recite a poem	T	125 83.3	15 10	10 6.6	25.92 **	50 33.3	62 41.3	38 25.3	8.91 **	40 26.6	101 67.3	9 6	6.22 *
	UT	153 61.2	32 12.8	65 26		63 25.2	144 57.6	43 17.2		97 38.8	142 56.8	11 4.4	
Narrate a story	T	127 84.6	18 12	5 3.3	16.83 **	32 21.3	70 46.6	48 32	12.50 **	80 53.3	52 34.6	18 12	11.97 **
	UT	199 79.6	14 5.6	37 14.8		63 25.2	130 52	57 22.8		99 39.6	131 52.4	20 8	
Conduct Role play	T	95 63.3	21 14	34 22.6	34.55 **	25 16.6	89 59.3	36 24	4.37 NS	43 26.6	82 54.6	25 16.6	6.81 *
	UT	85 34	34 17.2	122 48.8		48 19.2	122 48.8	80 32		43 26.6	82 54.6	25 16.6	
Undertake A multi-grade teaching	T	91 60.6	29 19.3	30 70	25.44 **	39 26	93 62	18 12	1.66 NS	40 26.6	85 56.6	25 16.6	13.36 **
	UT	88 35.2	92 36.8	80 32		74 29.6	142 56.8	34 13.6		99 39.6	134 53.6	17 6.8	

Figure in the parentheses are percentages

** Significant at 0.01 level

*Significant at 0.05 level

NS not significant

Note Comp = Competent, UC = Uncertain, NC = not competent, VMN = very much needed, FN= Fairly needed, LN = Least needed, T= Trained, UT = Untrained

Interpretation :

Table No. 14 has divided 7 item its centralize communication in classroom and find out the teacher competencies chi square method.

From Table 14 it can be observed that the null hypothesis of no significant independence was rejected at .01 levels of significance on possessed competencies of trained and untrained teachers on the following items concerning communication in classroom:

A-   Utilize the techniques of questioning

B-   Provide effective feedback

C-   Conduct dramatization

D-   Recite a poem

E-   Narrate a story

F-   Conduct role – play

G-   Undertake multi-grade teaching

It can further be noticed that a large majority of trained teachers i.e. 61% to 85% stated that they were competent in all the competencies of competency on communication in classroom. Where as in the case of untrained teachers only 34% to 80% of them stated

about possessing all competencies concerning this competency. Moreover a large number of untrained teachers stated that they were uncertain about possessing competencies like providing effective feed backs (33%), conducting dramatization (31%), and conducting role play (49%) unlike their trained teacher counterparts (11 to 23%). These facts need to be correlated with the training needs of teachers. From table 14 it can be observed that the null hypothesis of no significant independence regarding the perception of training needs by trained and untrained teachers on competencies 1,3 and 5 viz. utilizing the techniques of questioning, providing effective feedback conducting dramatization and narrating a story were rejected at. 01 level. In these cases most of the untrained teachers (77% to 91%) expressed greater needs for in-service training than their trained teacher counterparts (61% to 82%). Further it can be observed that the null hypothesis of no significant independence regarding the perception of training needs by trained and untrained teachers on the competency reciting a poem was rejected at.05 levels. In this case most of the untrained teachers (83%) expressed greater needs for in-service training than their trained teacher counter parts (75%).

While in the case of conducting role-play and undertake multi grade teaching the response patterns of trained and untrained teachers were found to be not independent. Most of the trained as well as untrained teacher (68% to 88%) perceived either very much or fair needs for in-service training in these two competencies. In the cases of

utilizing the techniques of questioning, providing effective feed back, concluding dramatization and narrating a story most of the trained teachers (68% to 82%) as well as untrained teachers (86% to 91) perceived either very much or fair need in-service training.

The future training needs of these teachers need to be analyzed to link them with possessed competencies and present training needs. From the same Table it can be observed that the null hypothesis of no significant independence was rejected at.01 level of significance on perception on trained and untrained teachers for future training needs on the competencies viz, utilizing the techniques of questioning, providing effective feed back, conducting dramatization, narrating a story and undertaking multi grade teaching most of the untrained teachers expressed greater needs (92% to 88%). In the case of conducting dramatization most of the trained as well as untrained teachers perceived either very much or fair needs for training in future (87%). From the same Table it can be observed that the null hypothesis of no significant independence was rejected at.05 level of significance on perception of trained and untrained teachers for future training needs on the competencies of reciting a poem and conducting role-play Most of the trained as well as untrained teachers (75% to 86%) perceived future training needs in these areas.

4.16 Experts perception of teacher competencies and training needs of teachers: communication in classroom

for good education communication in classroom is inhabitable factor. In in-service training programme communication in classroom concerning competency possessed present and future training needs have been presented with respective chi-square value.

TABLE - 15
Experts perception of teaching competencies and training needs of teachers : communication in classroom

Item	Competency possessed				Present Training Needs perceived	Future Training needs perceived						
	Comp	UC	NC	X2 value	VMN	FN	LN	X2 value	VMN	FN	LN	X2 value
Utilize the techniques Of teaching	28 / 56	17 / 34	5 / 10	22.8 **	34 / 68	13 / 26	3 / 6	30.04 **	35 / 70	12 / 24	3 / 6	32.68 **
Provide effective Feed back	30 / 60	15 / 30	5 / 10	19 **	27 / 54	20 / 40	3 / 6	18.27 **	25 / 50	22 / 44.	3 / 6	17.08 **
Conduct dramatization	24 / 48	20 / 40	6 / 12	10.71 **	38 / 76	4 / 8	8 / 16	41.45 **	29 / 58	17 / 34	4 / 8	25.69 **
Recite a poem	20 / 40	15 / 30	15 / 30	0.98 NS	21 / 42	15 / 30	14 / 28	1.71 NS	19 / 38	14 / 28	17 / 34	7.67 *
Narrate a story	24 / 48	19 / 38	7 / 14	9.15 *	23 / 46	19 / 38	8 / 16	7.23 *	22 / 44	17 / 34	11 / 22	10.56 **
Conduct role play	28 / 56	18 / 36	4 / 8	17.43 **	30 / 60	17 / 34	3 / 6	28.81 **	25 / 50	20 / 40	5 / 10	12.99 **
Undertake Multigrade Teaching	35 / 70	10 / 20	5 / 10	31 **	30 / 60	15 / 30	5 / 10	19 **	30 / 60	15 / 30	5 / 10	17 **

Figure in the parentheses are percentages

** Significant at 0.01 level

*Significant at 0.05 level

- NS = Not significant

Note Comp = Competent, UC = Uncertain, NC= Not competent, VMN= very much needed,

FN= Fairly needed, LN= Least needed .

Interpretation :

Table No. 15 has divided 7 item and competency to divide Uncertain and noncertain and find out the value chi squre method.

It can be observed from table 15 that the null hypothesis of equal appearance of experts opinion on competencies of teachers was rejected at .01 level in the case of teachers utilize the technique of questioning, provide effective feed back, conduct dramatization, conduct role play and undertake multi grade teaching while in the case of teachers narrate a story the null hypothesis rejected at .05 level. In the cases of teachers utilize the techniques of questioning, provide effective feed back conducting role play and undertake multi-grade teaching 56% to 70% of experts perceived that in total the teachers were competent ones. In the case of conducting dramatization recital of poem and narration of story only 40% to 48% experts stated about competencies possessed by teachers. From the same table it can be observed that in the case of reciting a poem and narrating a story there was significant variation of frequencies on opinion on training needs of teachers. However as a whole it was perceived that 42% to 46% of experts perceived very much need for teachers training in recite a poem and narrate a story teachers utilize the techniques of questioning, provide effective feed back, conduct dramatization, conduct role play, on the multi-grade teaching. In the case of a large majority of experts 84% to 94% perceived training needs either at fair or very much needed level. Similar expression of experts was noticed with regard to future training needs of schoolteacher.

4.17 Researchers rating of teaching competences of teachers training background wise : Communication in classroom

For qualitative education communication in classroom is inhabitable elements and factor. In in-service training programme communication in classroom adjoining competency possessed present and future training requirement have been explained with respective chi-square value.

TABLE 16
Researcher's rating of teaching competences of teachers training background wise: communication in classroom

Item	Trained				Untrained				
	2	1	0	Total	2	1	0	Total	X2 value
Utilize the techniques of teaching	7 28	11 44	7 28	25 100	4 16	6 24	15 60	25 100	5.20 NS
Provide effective feed back	9 36	10 40	6 24	25 100	5 20	7 28	13 52	25 100	4.25 NS
Conduct dramatization	4 16	6 24	15 60	25 100	10 40	11 44	4 16	25 100	10.41 **
Recite a poem	10 40	9 36	6 24	25 100	10 40	10 40	5 20	25 100	0.14 NS
Narrate a story	7 28	12 48	6 24	25 100	4 16	9 36	12 48	25 100	3.25 NS
Conduct role play	6 24	8 32	11 44	25 100	6 24	7 28	12 48	25 100	0.51 NS
Undertake Multi-grade bleaching	12 48	10 40	3 12	25 100	13 52	10 40	2 8	25 100	0.21 NS

Figure in the parentheses are percentages

** Significant at 0.01 level

*significant at 0.05 level

NS Not significant

Note 2 –Average , 1 Below Average , 0-Negligible

Interpretation :

Table No. 16 has divided 7 item and competencies has bifurcated two parts trained and untrained teachers and the total each parts hundred and to apply also chi squre methods.

From Table -16 it can be observed that as per rating of the researcher, teacher competency and training background of teachers was found to be significantly independent at .01 levels, in the case of conducting dramatization . In rest of the cases viz. Utilizing the techniques of teaching provide effective feedback, reciting a poem narrating a story conducting role play, undertaking multi-grade teaching, training background and teacher competencies were not found to be independent from each other. In these cases it was observed by the researcher that (24 to 48%) of trained and (24 to 44%) of untrained teachers were possessing below average competencies in all the seven components of competencies expect conducting dramatization. It was also observed by the researcher that a sizable number of trained teachers (24 to 60%) as well as (8to 60%) of untrained teachers had negligible competencies in all these areas except conducting dramatization. it was also observed that (16to 45%) of trained teachers (16 to 52%) of untrained teachers possessed average level of competencies in all the components expect conducting dramatization. Since it was observed

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that a large majority of trained and untrained teachers on these areas were of poor standards special emphasis may be given for in-service training programmed for teachers.

4.18 Teachers perception at teacher competence and training needs: Methods of Instruction

The success of in service education depends upon methods of instruction. The respondents concerning competency. Present and future training needs have been analyzed and placed in Table-17

TABLE -17
TEACHERS PERCEPTION OF TEACHER COMPETENCIES AND TRAINING NEEDS: METHODS OF INSTRUCTION

Item		Competency possessed				Present training needs Perceived				Future training needs Perceived			
		Comp	UC	NC	X^2 Value	VMN	FN	LN	X^2 Value	VMN	FN	LN	X^2 Value
Provide Experience Based Teaching	T	107 (71.3)	20 (13.3)	23 (15.3)	93.32 **	25 (16.6)	85 (56.6)	40 (26.6	3.18 NS	43 (28.6)	67 (4.6)	40 (26.6)	9.26 **
	UT	105 (42)	60 (24)	85 (34)		60 (24)	125 (50)	65 (26)		63 (25.2)	147 (58.8)	40 (16)	
Conduct Oral Drill exercise	T	118 (78.6)	18 (12)	14 (9.3)	12.31 **	30 (20)	86 (57.3)	34 (22.6)	1.90 NS	59 (39)	71 (47.3)	20 (13.30)	7.37 *
	UT	173 (69.2)	20 (8)	57 (22.8)		57 (22.8)	150 (60)	43 (17.2)		71 (28.4)	153 (61.2)	26 (10.4)	
Adopt Play Way method	T	109 (72.6)	21 (14)	20 (13.3)	21.04 *	39 (26)	81 (54)	30 (20)	1.63 NS	59 (39.3)	66 (44)	25 (16.6)	0.87 NS
	UT	134 (53.6)	31 (12.4)	85 (34)		80 (32)	125 (50)	45 (18)		97 (38.3)	119 (47.6)	34 (13.60)	
Adopt Attainment Approach	T	114 (76)	22 (14.6)	14 (9.6)	45.71 **	34 (22.6)	82 (54.6)	34 (22.6)	0.81 NS	45 (30)	80 (53.3)	25 (16.6)	0.36 NS
	UT	114 (45.6)	37 (15)	99 (39.6)		63 (25.2)	139 (55.6)	48 (19.2)		68 (27.2)	139 (5.60)	43 (17.2)	

Adopt Project Method	T	105 (70)	22 (14.6)	23 (15.3)	19.89 **	43 (28.6)	68 (45.3)	39 (26)	4.12 NS	57 (38)	75 (50)	18 (12)	1.78 NS
	UT	122 (48.8)	43 (17.2)	85 (34)		88 (35.2)	117 (46.8)	45 (18)		97 (38.8)	143 (57.2)	20 (8)	
Adopt Guided Discovery Method	T	93 (62)	34 (22.6)	23 (15.3)	24.81 **	48 (32)	82 (54.6)	20 (13.6)	3.02 NS	45 (30)	80 (3.30)	25 (16.6)	11.09 **
	UT	91 (36.4)	57 (23)	102 (40.8)		82 (32.6)	148 (59.2)	20 (8)		99 (39.6)	134 (53.6)	17 (6.8)	
Adopt Inductive Deductive Method	T	89 (59.3)	51 (34)	10 (6.6)	13.64 **	27 (18)	83 (55.3)	40 (26.6)	3.18 NS	37 (38)	66 (34)	27 (18)	16.28 **
	UT	142 (56.8)	60 (24)	48 (19.12)		60 (24)	139 (55.6)	51 (20.4)		99 (39.6)	137 (54.8)	14 (5.6)	
Adopt Problem Solving Method	T	114 (76)	18 (12)	18 (12)	10.72 **	23 (15.3)	91 (60.6)	36 (24)	22.26 **	45 (30)	78 (52)	27 (18)	29.14 **
	UT	151 (60.4)	42 (17)	57 (22)		85 (34)	137 (54.8)	28 (11.2)		128 (51.2)	11 (44.4)	11 (44.4)	
Adopt Method to Develop creativity	T	109 (72.6)	21 (14)	20 (13.3)	72.78 **	34 (22.6)	82 (54.6)	34 (22.6)	17.88 **	43 (28.6)	80 (53.3)	27 (18)	36.99 **
	UT	134 (53.6)	60 (24)	116 (16.4)		99 (39.6)	125 (50)	26 (10.4)		134 (53.6)	107 (42.8)	9 (3.6)	
Adopt Self instru-Ctional technique	T	74 (29.16)	21 (14)	20 (13.3)	13.02 **	32 (21.3)	84 (56)	34 (22.6)	7.35 *	39 (26)	101 (67.3)	10 (6.6)	7.16 *
	UT	134 (53.6)	62 (25)	54 (21.6)		57 (22.8)	162 (64.6)	31 (12.4)		97 (38.8)	136 (54.4)	17 (6.8)	
Adopt Group Discussion Method	T	116 (77.3)	18 (120)	16 (10.6)	21.25 **	23 (15.3)	93 (62)	34 (22.6)	7.93 *	43 (28.6)	82 (54.6)	25 (16.6)	13.82 **
	UT	142 (56.8)	34 (13.6)	74 (29.6)		57 (22.8)	156 (62.4)	37 (14.8)		116 (46.4)	111 (44.4)	23 (9.2)	
Implement New Education Idea	T	83 (54.6)	31 (20.66)	36 (24)	41.39 **	36 (24)	97 (64.6)	17 (11)	11.46 **	48 (32)	79 (52.6)	23 (15.3)	30.24 **
	UT	60 (24)	105 (42)	85 (34)		97 (38.8)	139 (55.6)	14 (5.6)		128 (51.2)	116 (46.4)	6 (24)	
Organize Competency Based Teaching	T	64 (42.6)	46 (30.6)	40 (26.6)	3.95 NS	43 (28.6)	87 (58)	20 (13.3)	16.45 **	73 (48.6)	70 (46.6)	7 (4.6)	5.20 NS
	UT	82 (32.8)	91 (36.4)	77 (30.8)		88 (35.2)	148 (59.2)	14 (5.6)		136 (54.4)	111 (44.4)	3 (1.2)	
Device And Adopt Innovative	T	84 (56)	32 (21.3)	34 (22.6)	9.73	25 (16.6)	85 (56.6)	40 (26.6)	27.46	59 (39.3)	82 (54.6)	9 (6)	9.45
	UT	111 (44.4)	54 (19.7)	85 (34)		105 (42)	100 (40)	45 (18)		122 (48.8)	125 (50)	3 (1.2)	

Figure in the parentheses are percentages

** Significant at 0.01 level

*Significant at 0.05 level

NS not significant

Note: Comp = Competeent, UC= Uncertain, NC = Not competent, VMN = Very much need,

FN= Fairly needed LN= least needed, T= trained UT = Untrained

Interpretation :

Table No. 17 has divided 4 item and competency bifurcated uncertain and noncertain to find out the result chi squire method.

From Table -17 it can be observed that the null hypothesis of no significant independence was rejected at.01 level of significance on possession trained teachers concerning all the competencies of methods of instruction.

In these cases most of the trained teachers (55% to 78%) expressed that they were more competent than their untrained counterparts (24 % to 69%). These facts need to be correlated with the training needs of teachers. From table 17 it can be observed that the null hypothesis of no significant independence regarding the perception of training needs by trained and untrained teachers on competencies like adopting problem solving method, adopting method to develop creativity, implementing new education idea and organize competency based teaching and devising and adopting innovative idea in teaching were rejected at. 01 while adopting self instructional techniques and adopting group discussion method was rejected at .05 level.

In all these cases most of the untrained teachers (85% to 94%) expressed greater needs for in service training than their trained

teacher counterparts (76% to 89.)In the case of providing experienced based teaching, conducting oral drill exercise adopting play way method, adopting concept attainment approach, adopting project method, adopting guided discovery method and adopting inductive deductive method the response pattern of trained and untrained teachers were found to the not significant. In these cases most of the trained as well as untrained teachers (72% to 92%) perceived either every much or fair needs for in-service training.

The future training needs for these teachers need to be analysed to link it with possessed competencies and present training needs. From the same table it can be observed that the null hypothesis of no significant of independence was rejected at .01 level of significance on perception of training needs for future by trained and untrained teachers on the competencies viz. providing experienced based teaching adopting guided discovery method, adopting inductive deductive method, adopting problem solving method adopting method to develop creativity, adopt group discussion method, implement new education ideas and devising competency base teaching. In all these competencies most of the untrained teachers (84% to 98%) expressed greater needs for in-service training in the future than their untrained teacher counterparts (73% to 85%).

While in the case of adopting play way method, adopting concept attainment approach adopting project method, and organizing competency based teaching the response pattern of trained and

untrained teachers were found to be not significantly independent from each other. In all these cases most of the trained as well as untrained teachers (73% to 99%) perceived either very much or fairly needs for future in-service training.

4.19 Experts perception of teacher competencies and training needs of teachers : Methods of Instruction : .

The success of in-service education depends upon methods of instruction. The respondents concerning competency.

Possessed. Present and future training needs have been analysed and placed in *table – 18*

TABLE 18

Experts perception of teacher competencies and training needs of teachers: Methods of instruction

Item	Competency possessed				Present Training Needs perceived				Future Training Needs perceived			
	Comp	UC	NC	X2 value	VMN	FN	LN	X2 value	VMN	FN	LN	X2 value
Experience Based teaching	30 / 60	10 / 70	10 / 20	16 **	25 / 50	20 / 40	5 / 10	12.99 **	29 / 58	16 / 32	5 / 10	17.32 **
Conducting drill exercise	24 / 48	15 / 30	11 / 2	5.31 NS	24 / 48	20 / 40	6 / 12	10.71 **	20 / 40	22 / 44	8 / 16	6.87 *
Adopt play way method	36 / 72	8 / 16	6 / 12	33.77 **	36 / 72	10 / 20	4 / 8	34.73 **	31 / 62	10 / 20	9 / 18	18.52 **
Adopt Concept approach	34 / 68	11 / 22	5 / 10	28.12 **	36 / 72	10 / 20	4 / 8	34.73 **	27 / 54	13 / 26	10 / 20	9.87 **
Adopt project Method	16 / 32	30 / 60	4 / 8	20.32 **	38 / 76	9 / 18	3 / 6	42.05 **	33 / 66	13 / 26	4 / 8	26.44 **
Guided discovery method	27 / 5	20 / 40	3 / 6	18.27 **	35 / 70	13 / 26	2 / 4	38.88 **	27 / 54	18 / 36	5 / 10	14.67 **
Inductive Deductive method	30 / 60	10 / 20	10 / 20	16 **	27 / 54	18 / 36	5 / 10	14.67 **	31 / 62	10 / 20	9 / 18	18.52 **
Problem solving method	25 / 50	20 / 40	5 / 10	12.99 **	30 / 60	12 / 24	8 / 16	16.48 **	27 / 54	20 / 40	3 / 6	18.27 **
Method to develop creativity	30 / 60	15 / 30	5 / 10	19 **	35 / 70	10 / 20	5 / 10	31 **	37 / 74	5 / 0	8 / 16	37.49 **
Self instructional technique	25 / 50	23 / 46	2 / 4	19.48 **	35 / 70	10 / 20	5 / 10	31 **	25 / 50	20 / 40	5 / 10	12.99 **
Group Discussion method	30 / 60	15 / 30	5 / 10	19 **	30 / 60	16 / 32	4 / 8	20.32 **	30 / 60	15 / 30	5 / 10	19 **
Implement new Education Idea	15 / 30	33 / 66	2 / 4	29.08 **	32 / 64	14 / 28	4 / 8	24.16 **	38 / 76	10 / 20	2 / 4	42.89 **
Organize Competency Based teaching	29 / 58	16 / 32	5 / 10	17.32 **	38 / 76	8 / 16	4 / 8	41.45 **	30 / 60	16 / 32	4 / 8	20.32 **
Device and adopt Innovative Ideas in teaching	30 / 60	18 / 36	2 / 4	23.62 **	37 / 74	10 / 20	3 / 6	38.69 **	36 / 72	10 / 20	3 / 6	38.69 **

Figure in the parentheses are parentages

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** Significant at 0.01 level

*Significant at 0.05 level

NS= not significant

Note Comp= Competent, UC= uncertain NC= not component, VMN= very much needed FN=Fairly needed LN=least needed.

Interpretation :

Table No. 18 has divided 14 items and competency related uncertain and noncertain teachers and find out the results chi square methods. This table is focused methods of instruction.

From Table-18 it can be observed that the null hypothesis of equal appearance of experts opinion on competencies of teachers was rejected at.01 level in the case of : experiment based teaching adopt play way method, adopt concept attainment approach project method guided discovery method, inductive deductive method, problem solving method, methods of develop creatively self instructional techniques, group discussion method, implement new educational idea, organize competency based teaching and device and adopt innovative ideas in teaching Only in the cases of conduct oral drill exercise the null hypothesis was rejected at .05 levels. In all theses cases expect adopt project method 50% to 75% of experts stated that the trained as well as teachers were competent ones. But in the case of conduct oral drill exercise and adopt project method only 32% to 48% of experts stated about competencies possessed by trained and untrained teachers. From the same table it can be observed that in all the areas of competencies a large majority of experts (84% to 94%)

perceived training needs either at very much or fair needed level for trained as well as untrained teachers. Similarly most of the experts (82% to 96%) stated that teachers need future training in all these competencies either at fair or very much needed level.

4.20   Researchers rating of teaching competencies of teachers training background wise: Methods of Instruction

The success of in-service education depends upon technique of instruction . The respondents concerning competency possessed. Present &Future training requirement have been analyzed and calculated placed in Table-19.

TABLE -19
Researcher's rating of teaching compotences of teacher,s training background wise: Methods of instruction

Item	Trained				Untrained				X2 value
	2	1	0	Total	2	1	0	Total	
Provide Experience Based teaching	9 36	8 32	8 32	25 100	8 32	10 40	7 28	25 100	0.35 NS
Conduct oral drill exercise	10 40	9 36	6 24	25 100	11 44	8 32	6 24	25 100	0.10 NS
Adopt play Way method	8 32	10 40	7 28	25 100	6 24	9 36	10 40	25 100	0.86 NS
Adopt attainment approach	4 16	9 36	12 48	25 100	3 12	4 16	18 72	25 100	3.26 NS
Adopt project method	3 12	5 20	17 68	25 1'00	2 8	4 16	19 76	25 100	0.42 NS
Adopt Guided discovery method	3 12	6 24	15 64	25 100	3 12	5 20	17 68	25 100	0.12 NS
Adopt Inductive Deductive method	11 44	8 32	6 24	25 100	4 16	5 20	16 64	25 100	8.50 *
Adopt problem Solving method	14 56	6 24	5 20	25 100	3 12	8 32	14 56	25 100	11.66 **
Adopt Method to Develop creativity	10 40	9 36	6 24	25 100	5 20	6 24	14 56	25 100	5.47 *
Adopt Self instructional technique	15 60	9 36	1 4	25 100	6 24	9 36	10 40	25 100	11.22 **
Adopt group Discussion method	9 36	12 48	4 16	25 100	3 12	7 28	15 60	25 100	10.68 **
Implement New Education Idea	3 12	7 28	15 60	25 100	2 8	5 20	18 72	25 100	0.80 NS
Organize Competency Based teaching	1 4	4 16	20 80	25 100	1 4	3 12	21 84	25 100.	0.17 NS
Deceive And Adopt innovative Ideas in teaching	4 16	5 20	16 64	25 100	3 12	4 16	18 72	25 100	0.37 NS

Figure in the parentheses are percentages

** Significant at 0.01 level

*Significant at 0.05 level

- NS Not Significant

Note 2 Average, 1- Below Average, 0 – Negligible

Interpretation :

Table No. 19 has divided 14 items and each item has bifurcated two parts trained and untrained and find out the results chi square method.

From table -19 it can be observed that as per rating of researcher, teacher competencies and training background of teachers was found to be significantly independent at .01 level in the case in the adopting problem solving method, adopting self instructional teaching and adopting group discussion method. While in the case of adopting in inductive and deductive method and adopting methods of develop activities teacher competencies and training background of teachers was found to be significantly independent at. 05 levels as per researcher. In the case of adopting problem solving method and adopting self-instructional technique most of the trained teachers (56 to 60%) were possessing average competencies while only (12 to 24%) of untrained teachers possess average competencies in this regard. A sizable number of untrained teachers i.e. 76 to 88% were possessing average competencies while only (12 to 24%) of untrained teachers possess average competencies in this regard. A sizable number of untrained teachers i.e. 76 to 88 possessed either below average and negligible competencies. In adopting group discussion method only 16% of

trained teachers were possessing negligible competencies while 60%
of untrained teachers were possessing average competencies while only
(12 to 24%) of untrained teachers possess average competencies in this
regard. A sizable number of untrained teachers i.e. 76 to 88% possess
either below average and negligible competencies. In adopting group
discussion method only 16% of untrained teachers were possessing
negligible competencies while 60% of untrained teachers were
possessing negligible competencies in this regard. In the case of
adopting inductive and deductive method and adopting method of
develop activities large number of untrained teachers i.e. 82 to 84%
were possessing either below average of negligible competencies than
their trained teachers counterparts (60%) . In rest of the cases most of
the trained teachers (60 to 96%) as well as untrained teachers (56 to
96%) were possessing below average or negligible competencies in all
these 9 components of competencies concerning methods of
instruction. It can be concluded in table that trained and untrained
teachers were of poor standards in these areas of competencies.
Therefore in-service training in this regard may be emphasized.

4.21 Teachers perception of teacher competencies and Training needs: Evaluation of learning

Evaluation helps to achieve the training objectives through
different ways Evaluating of learning concerning competency possessed,
present and future training needs have been present in Table-20.

TABLE -20

Teachers perception of teacher competencies and training needs: Evaluation of learning

Item		Competency possessed				Present training needs Perceived				Future training needs Perceived			
		Comp	UC	NC	X^2 Value	VMN	FN	LN	X^2 Value	VMN	FN	LN	X^2 Value
Construct appropriate Evaluation Tools	T	100 66.6	41 27.3	9 6	34.91 **	40 26.6	96 64	14 9.3	7.45 *	45 30	82 54.6	23 15.3	11.49 **
	UT	115 46	58 23.2	7 30.8		94 37.6	125 50	31 12.4		108 43.3	125 50	17 6.8	
Conduct Continious & Comprehensive Evaluation	T	93 62	21 14	36 24	11.36 **	36 24	98 65.3	16 10.6	4.46 NS	52 34.6	84 56	14 9.3	11.75 **
	UT	116 64.4	66 26.4	68 27.2	.	65 26	162 64.8	23 92		99 39.6	137 54.8	14 5.6	
Assessing Student Performance	T	125 83.3	23 15.3	2 1.3	17.72 **	27 18	93 62	30 29	8.41 *	42 32	82 54.6	20 13.3	8.48 *
	UT	188 75.2	28 11.2	34 13.6		77 30.8	125 50	48 19.2		116 46.4	103 41.2	31 12.4	
Organize Remedial Instruction	T	82 54.6	28 18.6	40 26.6	22.34 **	43 28.6	91 60.6	16 10.6	1.28 NS	45 300	78 52	27 18	23.78 **
	UT	77 30.8	74 29.2	99 39.60		82 32.8	148 59.2	20 8		91 36.4	150 60	9 3.6	
Diagnose Student Learning Difficulties	T	107 71.3	27 18	16 10.6	43.77 **	30 20	97 64.6	23 15.3	3.38 NS	36 24	82 54.6	32 21.3	17.01 **
	UT	97 38.8	65 26	88 25.2		68 27.2	154 61.6	28 11.2		99 39.6	128 51.2	23 9.2	

Figure in the parentheses are percentages

** Significant at 0.01 level

*Significant at 0.05 level

NS= Not significant

Note Comp = Competent, UC=Uncertain, NC= Not competent, VMN= Very much needed FN=Fairly needed, LN= least needed. T= Trained UT= Untrained

Interpretation :

Table No. 20 has divided 5 item and competency possesed uncertain and noncertain and find out the resutls chi square methods. To apply chi square formula.

From Table 20 it can be observed that the null hypothesis of no significant independence was rejected at .01 level of significance on possessed competencies of trained and untrained teachers on the following items concerning evaluation of learning:

A- Constructing appropriate evaluation tools

B- Conducting continuous and comprehensive evaluation,

C- Assessing student performance

D- Organizing remedial instruction

E- Diagnosing student learning difficulties.

In all these cases most of the trained teachers (55% to 83%) expressed that they were more competent than their untrained counterparts (31% to 75%) These facts need to be correlated with the training needs of teachers. From Table 18 it can be observed that the null hypothesis of no significant independence regarding the perception of training needs by trained and untrained teacher on competencies like constructing appropriate evaluation tools, assessing student performance were rejected at .05 levels. In the case of continuous and comprehensive evaluation organizing remedial instruction and diagnosing student learning difficulties the response pattern of trained and untrained teachers were found to be not significant. In all these

case most of the trained teacher (80% to 91%) as well as most of the untrained teacher (81% to 91%) perceived the in-service training either very much needed or fairly needed.

The future training needs of these teachers needs to be analyzed and to be linked with possessed competencies and present training needs. From the same table it can be observed that the null hypothesis of no significant independence was rejected at .01 level of significance on perception of training needs for future trained and untrained teachers on the competencies viz conducting appropriate evaluation tools, conducting continuous and comprehensive evaluation Organize remedial instruction and diagnosing student learning difficulties. It can be observed from this table that the null hypothesis of no significant independence the perception of future training needs by trained and untrained teachers in assessing student performance was rejected at .05 levels. In all these cases most of the untrained teachers (88% to 96%) expressed greater needs for in-service training than their trained teacher counterparts (79% to 91%)

4.22 Experts perception of teacher competencies and training needs of teachers: Evaluation of learning

Evaluation helps to achieve the training objectives through different ways. Evaluating of concerning competency possessed, present and future training needs have been present square value

TABLE -21

Experts perception of teacher competencies and training needs of Teachers: Evaluation of Learning

Item	Competency possessed				Present Training Needs perceived				Future training needs perceived			
	Comp	UC	NC	X2 value	VMN	FN	LN	X2 value	VMN	FN	LN	X2 value
Conduct approach Evaluation tools	24 48	24 48	2 4	19.36	25 50	20 40	5 10	12.99 **	30 60	15 30	5 10	19 **
Conduct continues & complehencing evaluation	25 50	20 40	5 10	12.99 **	28 56	19 38	3 6	19.23 **	27 54	20 40	3 6	18.27 **
Assigning student performance	33 66	12 24	5 10	25.48 **	26 52	18 36	6 12	12.15 **	31 62	10 20	9 18	18.52 **
Organize remedial instruction	25 50	20 40	5 10	12.99 **	25 50	22 44	3 6	17.08 **	22 44	22 44	6 12	10.24 **
Diagnose student learning difficulty	23 46	22 44	5 10	12.28 **	30 60	17 34	3 6	28.81 **	30 60	17 34	3 6	28.81 **

Figure in the parentheses are percentages

- ** Significant at 0.01 level
- *Significant at 0.05 level   .

NS = Not Significant

Note Comp = Competent, UC= Uncertain NC= Not competent, VMN= Very much needed FN=fairly needed LN= least needed .

Interpretation :

Table No. 21 has divided 5 item, its centralize evaluation of learning. The competency has possesed uncertain and noncertain to use chi square formula.

From Table-21 it can be o bserved that the null hypothesis of equal appearance of experts opinion on competencies of teachers

was rejected at .01 level in the cases of construct appropriate evaluation tools, conduct and comprehensive evaluation, assess student performance organize remedial instruction and diagnose student learning difficulties. In all these cases (46% to 66%) of experts stated that in total teacher where competent ones. From the same Table it can be observed that all the areas of on competencies a large majority of experts (90% to 94%) perceived training needs for trained and untrained either at very much or fair needed level. Similarly most of the experts (82% to 94%) stated that teachers need future training in construct appropriate evaluation tools, conduct continuous and comprehensive evaluation assess students performance organize remedial instruction and diagnose student learning difficulties competencies either at fair or very much needed level.

4.23 Researchers rating of teaching competences of teachers training background wise: Evaluation of learning

Evaluating helps to achieve the training objectives through different ways. Evaluation rating of teaching competency of teacher present training background by Evaluation of learning.

TABLE-22

Researcher rating of teaching competences of teachers training background wise: Evaluation of learning

Item	Trained				Untrained				
	2	1	0	Total	2	1	0	Total	X2 value
Construct approach Evaluation tools	3 12	5 10	17 68	25 100	2 8	7 28	16 64	25 100	0.56 NS
Conduct Continues and Comprehensive evaluation	4 16	5 20	16 64	25 100	3 12	4 16	18 72	25 100	0.37 NS
Assessing Student performence	10 40	9 36	6 24	25 100	11 44	8 32	6 24	25 100	0.17 NS
Organise remedial instruction	4 16	6 24	15 60	25 100	3 12	5 20	17 68	25 100	0.36 NS
Diagnose student Learning difficulties	6 24	4 16	15 60	25 100	4 16	5 20	16 64	25 100	0.54 NS

Figure in the parentheses are percentages

** Significant at 0.01level

*Significant at 0.05 level NS Not significant

Note 2- Average 1- Below Average 0-Negiligble

Interpretation :

Table No. 22 has centralize evaluation of learning. It is 5 item and two parts trained and untrained teachers. Each parts results 100.

From table 22 it can be observed that perating of the researcher teacher competency and training background of teacher were not significantly independent in the causes of conducting appropriate evaluation tools, conduct continuous and comprehensive evaluation, assess student performance, organizing remedial instruction, diagnose student learning difficulties in all these cases expect assess student performance, it was observed by the researcher that a large majority of trained (60 to 68%) as well as untrained (64 to 72%) teacher were possessing negligible competencies. In the case of assess student performance a large number of trained as well as untrained teachers (56 to 70%) were found either possessing below average or negligible competency. In all the cases it can be observed that a large majority of trained and untrained teachers were of poor standards on these areas of competency. Therefore, special emphasis may be given for in-service training programmed for teachers regarding all the components of competencies concerning evaluation of learning.

4.24 Teachers perception of teacher competencies and training needs : Diagnosis and Remediation

Diagnosis and remediation concerning competency possessed present and future training needs have been presented with respective chi-square value.

TABLE 23

Teachers perception of teacher competencies and training needs : Diagnosis and remediation

Item	Competency possessed	Comp	UC	NC	X2 value	Present training Needs Perceived VMN	FN	LN	X2 value	Future Training Needs perceived VMN	FN	LN	X2 value
Conduct Follow up activities	T	104 69.3	26 17.3	20 13.3	33.10 **	32 21.3	98 65.3	20 13.3	6.12 *	39 26	86 57.3	25 16.6	8.86 *
	UT	102 40.8	66 26.4	82 32.8		54 21.6	176 70.4	20 8		74 29.6	145 58	31 12.4	
Orgnise and conduct Guidance activities	T	91 60.6	45 30	14 9.3	45.15 **	37 24.6	95 63.5	18 12	13.3 **	45 30	80 53.3	25 16.6	21.62 **
	UT	119 47.6	34 13.6	97 38.3		102 40.8	134 53.6	14 5.6		114 45.6	125 50	11 4.4	

Figure in the parentheses are percentages

** Significant at 0.01 level

*Significant at 0.05 level

NS = not significant

Note Comp= Competent,, UC= Uncertain , NC= Not competent, VMN= very much needed

FN= fairly needed LN least needed T= Trained UT= Untrained .

Interpretation :

Table No. 23 is centralized diagnosis and remediation. Its competency uncertain and noncertain and to find out the results chi square method.

From table 23 it can be observed that the null hypothesis of no significant independence was rejected at .01 level of significance on possessed competencies of trained and untrained teachers on the following items concerning diagnosis and re-mediation such as : Conducting follow up activities and organizing and conduct and guidance activs. In these competencies most of the trained teachers (61% to 69%) stated that they were competent than their untrained teacher counterparts (41% to 48%)

These facts need to be correlated with the training needs of teachers. From the same table it can be observed that the null hypothesis of no significant independence regarding the perception of training needs by trained and untrained teachers on competency like organizing and conducting guidance activities and conducting follow up activities were rejected at .01 level and .05 level of significance respectively In both the case most of the untrained teacher (92% to 94%) expressed greater need of in-service training than their trained counterparts (86% to 88%) . The future training needs of these teachers needs to be analyzed and to be linked with possessed competencies and present training needs. From the same table it can be observed that the null hypothesis of no significant independence was rejected at .01 level of significance on perception of training needs for future of trained and untrained teachers on the on the competencies of organizing and conducting guidance activities. Moreover the null hypothesis of no independence on conducting follow up activities and managing the learning environment was rejected at .05 level. In both these cases most of the untrained teachers (88% to 96%) expressed greater needs for training in future than their trained counterparts (87%).

PARTICIPATION AND SELF STUDY ACTIVITIES

I.

- Participating in group discussion
- Participating in seminar, symposium an debts.
- Participating in workshop
- Preparing learning aids
- Preparing question papers
- Organising quiz programmes

II. Participation in Self-study activities relating to

- Problem solving.
- Using printing self-study materials.
- Using available audio-video media for self study

Methods and Media to be incorporated in In-service education Programmes :

Organisation of various methods and approaches related to classroom activities and self-studies read as :

- Lectures
- Demonstration
- Experiment
- Project
- Community survey
- Seminars, symposiums
- Self study
- Micro teaching
- Models of teaching

Besides above there must be Provision for use of different media and materials such as :

- Using audio-visual cassettes
- Using the VCP/VCR
- Using the TV
- Using the Radio
- Radio conferencing
- Tele conferencing
- Computer network at wider level as well as local level
- Provision of self-study materials

Quality of Resource Persons of In-service education Programmes :

- Experienced and qualified teachers with special referene to subject like English language and Science.
- Social workers like Economist and planners
- Other profession in the community like Doctors, Lawyers and retired persons (teachers and others)
- Educational administrators
- Teachers Experts
- Creative writers

Formative and Summative Evaluations and Follow-up Activities of In-service Education Programmes

I. - Provision for feed back through overall discussion
   - Provision for feedback given through written from
II. - Provision for reinforcing curricular activities

- Provision reinforcing to participate in co-curricular activities

- Motivating to join various in-service education programmes

III Conducting Evaluation Through

- Self assessment

- Paragraphs

- Overall decisions

- Observation and Participating different activities

IV Conducting follow-up through

Seeking opinion of participants, School Head masters, School inspectors (S.I.), District Inspectors (D.I.) on regular intervals and organising interactiion sessions among teachers at clusters level.

Summary of present needs as perceived by majority untrained teachers on the following areas :

Category-I	Plan lesson, identify student learning needs and interest on tribal children, assign home work.
Category-II	Preparation teaching aids, utilise text books and manuals, utilise black board, utilise teaching aids, demonstrate experiment, develop learning activities on competency and analysis a text book.
Category-III	Motivate the student, establish, rapport with tribal student through informal communication, conduct and involve student in cultural

	activities and motivate the student specially higher age group.
Category-IV	Utilise the techiques of questioning, provide effective feedback, conduct dramatization, conduct a story, conduct a story, conduct role play and underdate multi grade teaching.
Category-V	Conduct oral drill exercise, adopt play way method, concept attainment approach, project method, guided discovery method, inductive deductive method, problem solving method, method of develop creativity, self instructional techiques, group discussion method, implement new education ideas, organize competency based teaching and device and adopt innovative ideas in teachign.
Category-VI	Construct appropriate evaluation tools, conduct continues and comprehensive evaluation tools, assessing students performances, organise remedial instruction and dignose student learning difficulties.
Category-VII	Conducts follow up activities and organize guidance activities.
Category-VIII	Manage the learning environment.

Category-IX	Arrange outdoor activities, conduct sports and game, utilise the community resource.
Category-X	Establish rapport with parents, participate of social activities
Category-XI	Provide educational assistance for children and Cater to mixed ability groups
Category-XII	Develop insturctional planning, maintain record, work in team colleague to establish rapport with staff and conduct action research.

In addition to above areas majority of trained and untrained teachers commonly expressed present needs for training on following areas :

    (i)   Summerise the lesson

    (ii)   Utilise community resource

    (iii)   Operation hardware (TV/Radio)

    (iv)   Recite a poem

    (v)   Provide experienced absed teaching

    (Vi)   Undertake self evaluation

Majority of trained and untrained teachers commonly expressed future training needs on following areas :

Category-I	Summaries the lesson, assign homework.
Category-II	Demonstrate experiment, utilise community resource, develop learning activities on

competency in each subject and operating hard ware (TV/Radio).

Cagtegory-III	Establish rapport with back bantures student, manage the class room discipline and motivate the student specially higher age group.
Category-IV	Narrate a story and conduct role-play
Category-V	Provide experienced based teaching, conduct oral drill exercise, adopt play way method and adopt concept attainment approach.
Category-VII	Manage the learning environment.

Summary of future needs perceived by teachers and experts :

Category-I	Plan lesson, identify student learning needs and interest of primary children
Category-II	Preparation teaching aids, utilise text book and manuals, utilise black utilise teaching aids, demonstrate experimennts, utilise community resource and develop learning activities in competency in each subject.
Category-III	Motivate the student, conduct and involve student in cultural activities and motivate the subjects specially higher age group.
Category-IV	Utilise the techniques of questioning, provide effective feed back, conduct dramatisation, conduct role play and undertake multigrade teaching.

Category-V	Provide experience based teaching, adopt play way method, adopt attainment approach, adopt project method, adopt guided discovery method, adopt inductive deductive method, adopt problem solving method, adopt method to develop creativity, adopt self instructional techniques, adopt group discussion method, implement new education ideas, organise competency based teaching and device and adopt innovative ideas in teaching.
Category-VI	Construct approapriate evaluation tools, conduct continues, comprehensive evaluation, assisting students' performance and dignosis student learning difficulties.
Category-VII	Conduct follows up activities and organise and conduct guidance activities.
Category-VIII	Manager the learning environment.
Category-IX	Arrange outdoor activities and utilise the community resources.
Category-X	Establish rapport with parents and participate social activities.
Category-XI	Provide education assistance for children and cater to mixed ability group.

Category-XII	Maintain records, Establish rapport with staff, undertake self evaluation and conduct action research.

    (i)   Develop institutional planning

    (ii)   Work in a team collegue.

    (iii) Assist in Conduct survey

Untrained teacher distinct perception about future training needs on the following areas :

(i)   Analyse a text book

(ii)   Recite a poem

(iii) Organise remedial instruction

(iv) Conduct sports and game

(v)   Develop institutional planning

(vi) Work in a team colleague

(vii) Assisting in conducting survey

Trained teachers distinct perception about future training needs on the following areas :

(i)   Summarise the lesson

(ii)   Assign home work

(iii) Operatiion hardware

(iv) Establish rapport with tribal students

(vi) Narrate a story

(vii) Conduct oral drill exercise

Majority of untrained teachers expressed future training needs on the following areas :

Category-I	Plan lesson and Identify student learning needs and interest of tribal children.
Category-II	Prepae teaching aids, utilise text book and manuals, utilise black board utilise the teaching aids and analysis a text books.
Category-III	Motivate the student, conduct and involve student in cultural activities.
Category-IV	Utilise the techniques of questioning, provide effective feedback, conduct dramatisation, recie a poem and undertake multi-grade teaching.
Category-V	Adopt project method, adopt guided discovery method, adopt inductive deductive method, adopt problem solving method, adopt method of develop creativity, adopt self instructional technique, adopt group discussion method, implement new education idea, organise competency based teaching and device and adopt innovative ideas in teaching.
Category-VI	Construct appropriate evaluation tools, conduct continues, comprehensive evaluation, assessing student performance, organise remedial insturction and diagnose student learning difficulties.

Category-VII	Conduct follow up activities and organise and conduct guidance activities.
Category-IX	Arrange outdoor activities , conduct sports and game, utilise the community resource.
Category-X	Establish rapport with parents and participate of social activities.
Category-XI	Provide educational assistance for children and cater to mixed ability group.
Category-XII	Develop institutional planning, maintain records, work in a team colleague, establish rapport with staff, undertake self evaluation, conduct action research, assisting in conducting survey.

More ever, the experts perceived present needs for training in almost all the areas as stated above.

Chapter- 5

CURRICULUM FRAMEWORK

INTRODUCTION

I.   In service education curriculum frame work.

II. Present and future In-service education
     curriculum education framework for untrained
     teachers objectives content areas.

III. Common curriculum frame work for present and
     future In-service education programme for
     trainined and untrained service teachers.

IV. Learning activities to be incorporated in In
     -service education program.

CURRICULUM FRAMEWORK INTRODUCTION

This chapter expresses the alternative curriculum framework for In-service education of teachers. It incorporates the details of different segments of curriculum framework for untrained teachers. Specific training curriculum for untrained primary school teacher and common curriculum for in-service education of trained and untrained primary school teachers of Uttar Pradesh have been identified on the basis of analysis of responses of teachers, experts, teachers educators and researchers observation as reported in foregoing chapter.

OBJECTIVE - IV

To explore alternative curriculum frame work for in service teacher education of primary school teacher towards 2010 A.D.

IN- SERVICE EDUCATION CURRICULUM FRAMEWORK

Training curriculum and training needs of untrained primary school teachers of Uttar Pradesh have been identified on the basis of responses of teachers, experts teacher educators and research scholars observation as per following diagram:

The findings related to aims two and three have set guidelines for framing of training curriculum. The elements identified for training curriculum read as:

1. Objectives

2. Content

3. Methods and media

4. Learning activities

5. Resource persons

6. Evaluation procedure

Present and futures In-service education curriculum frame work for untrained teachers: Objectives Content Areas "Construtive plays, good habbits for health and things pertaining to good behaviour are the main item of the curriculum. The school building and the necessary equipment are arranged according to the stage of development of children.

I. Present and futures In-service education curriculum frame work for untrained teachers: Objectives Content Areas

Objectives	Preferred content areas for present training programme of untrained teachers	Preferred content areas for future training programmes of untrained teachers.
I. To develop competencies concerning preparation for instruction.	-Planning Lesson -Identification of student learning needs and interest of primary Children.	-Plan lesson -Identify student learning needs and interest of primary Children.
II. To develop competencies among teachers for develop preparation and utilisation of instructional materials.	-Assignment homework. -Preparation of teaching aids.	-Preparation teaching aids.
III. To make teachers able to motivate primary School children for education and cultural activities.	-Utilisation text book and manuals. -Utilisation of blackboard -Utilization of teaching aids -Demonstration of experiments -Development of earning activities on competencies in each subject -Analysis of text book.	-Utilise text book and manuals -Utilise black board Utilize the teaching aids.

IV. To develop communication abilities among teachers in classroom.	-Motivate the student -Establish rapport with primary student through informal communication. -Conduct and innovative student in cultural activities.	-Motivate the student -Conduct and involve student in cultural activities.
V. To enable Teachers to use different methods of instruction.	-Motivate the student specially higher age group. -Utilise the techniques of questioning. -Provide effective feedback -Conduct dramatization -Narrate a story -Conduct role play -Undertake multigrade teaching. -Conduct oral drill exercise -Adopt Play way method -Adopt concept attainment approach. -Adopt project method. -Adopt guided discovery method . -Adopt inductive deductive method. -Adopt problem solving method. -Adopt self instructional techniques. -Adopt group discussing method.	-Utilise the technique questioning. . -Provide effective feedback. - C o n d u c t dramatization. -Recite poem -Undertake multigrade teaching. -Adopt project method -Adopt guided discovery method. -Adopt inductive deductive method -Adopt problem solving method -Adopt method to develop creativity. -Adopt self i n s t r u c t i o n a l techniques. -Adopt group discussion method. -Implement new education idea.

VI. To develop skill evaluation of learning.	-Implement new education ideas.	-Organise competence based teaching.
	-Oraganise competence based teaching	Device and adopt innovative ideas in teaching.
	Device and adopt innovative ideas in teaching.	
	-Construction appropriate evaluation tools	-Construct appropriate evaluation tools.
	-Conduct continues and comprehensive evaluation	-Conduct continuous and comprehensive evaluation.
	-Asses student performance	-Assess student performance
VII. To enable teachers using different diagnostic and remedial measures.	-Organise remedial instruction.	-Organise remedial instruction.
	-Diagnose student learning difficulties.	-Diagnose student learning difficulties.
VIII. To acquaint leachers with progressive curricular activities and community participation.	-Conduct follow-up activities	-Conduct follow-up activities.
	-Organise and conduct guidance activities.	Organize and conduct guidance activities.
	-Arrange out door activities(visit trips).	-Arrange outdoor activities(visits/Trips)
	-Conduct sports and game.	-Conduct sports on game
	-Utilise the community resources especially in case of non availability of essential teaching aids from government.	-Utilise the community resource specially in case of non availability of
	-Establish rapport with parents and student	

	community through informal way-Participation of social service activities.	essential teaching aids from Government. -Establish rapport with parents and student communities through internal way
IX. To develop comptetencies among teachers for special education.	-Provide educational assistance for Children with special need. -Cater to mixed ability groups.	-Participating of social service activities. Provide educational assistance for Children with special need. -Cater to mixed ability groups.
X. To develop teachers competencies for instructional planning.	-Develop institutional planning. -Maintaining record. -Work in a team colleague -Establish rapport with staff -Conduct action research -Assisting in conducting survey.	-Develop institutional planning -Maintaining record -Work in a team colleague -Undertake self evaluation -Conduct action research -Assisting in conducting survey.

II. Common curriculum frame work for present and future In-service education parogrammes for trained and untrained in-service teachers:

Objectives and content areas

Objectives	Preferred content areas for present training programme for trained and untrained teachers	Preferred content areas for future training programmes of trained and untrained teachers.
I. To deavelop c o m p e t e n c i e s concerning preparation for instruction.	-Summaries the lesson	-Summeries the lesson -Assign home work.
II. To develop competencies among teachers for develop preparation and utilisation of instructional materials.	-Utilise community resource -Operation hand work (TV/Radio)	-Demonstrate experimental -Utilise community resources -Develop learning activities on competencies in each subject. -Apparition hardwore.
III. To make teachers able to motivate primary children for education and cultural activities.	-Manage the discipline -Recite a poem	-Establish rapport with primary students. -Manage the classroom discipline. -Narrate a story -Conduct role play

IV. To develop communication abilities among teachers in classroom.	-Provide experience based teaching.	-Provide experience based teaching -Conduct oral drill exercise
V. To enable Teachers to use different methods of instruction.	-Undertake self evaluation -Value education -Action research	-Adopt play way method -Adopt concept attainment approach.
VI. To develop competencies in classroom management.	-Subject up gradation in different areas with special reference to English and science.	-Manage the learning environment.
VII. To develop Competencies for institutional planning.	-Physical education	Value education -Action research
VIII. To acquaint teachers with various innovation and significant areas of quality education at elementary stage.	-Linking curriculum transation with culture and environment of school children.	-Subject up gradation in different areas with special reference to English and science. -Physical education -Linking curriculum transation with culture and environment of school children.

Table No. –1   Present and Futures In-service education curriculum frame work
for untrained teachers : Objectives and Content Areas

Objectives	Preferred content areas for present training programme of untrainined teachers	Preferred content areas for future training programmes of untrained teachers
I. To develop competencies concerning preparing for instruction	-Planning lesson -Identification of student learning needs and interest of primary -Assignment homework	-Plan lesson -Identify student learning needs and interest primary children
II. To develop competencies among teachers for development preparation and utilization of instructional materials.	-Preparation of teaching aids. -Utilization textbook and manuals -Utilization of black board -Utilization of teaching aids -Demonstration of experiments -Developments of earning activities on competencies in each subject -Analysis of text book	-Preparation teaching aids. -Utilize text book and manuals -Utilize black board. - Utilize the teaching aids.
III. To make teachers able to motivate Primary children for education and cultural activities.	-Motivate the student -Establish rapport with Primary student though informal communication -Conduct an innovative student in cultural activities. -Motivate the student specially higher age group	-Motivate the student -Conduct and involvement student in culcutral activities.
IV. To develop communication abilities among teachers in class room	-Utilise the techniques of questioning -Provide effective feedback -Conduct dramatization -Narrate a story -Conduct role play -Undertake multi grade teaching	-Utilize the technique fo questioning -Provide effective feedback -Conduct dramatization -Recite poem -Undertake multi grade teaching

V. To enable Teacher to use different methods of instruction	-Conduct oral drill exercise -Adopt play way method -Adopt concept attainment approach -Adopt project method -Adopt guided discovery method Adopt Inductive deductive method -Adopt problem solving method -Adopt method to develop method - Adopt method to develop creativity -Adopt self instructional techniques -Adopt group discussing method -Implement new education ideas -Organise competence based teaching -Device and adopt innovative ideas in teaching	-Adopt project method -Adopt guided discovery method -Adopt inductive deductive method -Adopt problem solving method -Adopt method to develop creativity -Adopt self instructional techniques. -Adopt group discussing method -Implement new education ideas -Organise competence based teaching -Device and adopt innovative ideas in teaching
VI. To develop skill of evaluation of learning	-Construction appropriate evaluation tools -Conduct continues and comprehensive evaluatrion -Asses student performance. -Organise remedial instruction -Diagnose student learning difficulties.	-Construct approapriate evaluation tools. -Conduct continuous and comprehensive evaluation. -Assess student performance -Organise remedial instruction -Diagnose student learning difficulties.

VII. To enable teachers using different diagnostic and remedial measures	-Conduct follow-up activities -Organise and conduct guidance activities.	-Conduct follow-up activities. -organize and conduct guidance activities.
VIII. To acquaint teachers with progressive curricular activities and community participation	-Arrange outdoor activities (visit trips) -Conduct sports and game -Utilise the community resources especially in case of non availability of essential teaching aids from Government. -Establish rapport with parents and teacher community through informal way. -Participation of social service activities.	-Arrange outdoor activities (visit trips) -Conduct sports and game -Utilise the community resources especially in case of non availability of essential teaching aids from Government. -Establish rapport with parents and teacher community through informal way. -Participation of social service activities.
IX. To develop competencies among teachers for special education.	-Provide educational assistance for children with special need. -Cater to mixed ability groups.	-Provide educational assistance for children with special need. -Cater to mixed ability groups.
X. To develop teachers competencies for instructional planning.	-Develop institutional planning -Maintaining record -Work in a team colleague -Establish rapport with staff -Establish rapport with staff -Conduct action research -Assisting in conducting survey.	-Develop institutional planning -Maintaining record -Work in a team colleague -Establish rapport with staff -Establish rapport with staff -Conduct action research -Assisting in conducting survey.

Table No. –2   Common Curriculum frame work for present and futures In-service education programmes for trained and untrained In-Service teachers : Objectives and content areas.

I. To Develop competencies concerning preparation for instruction.	-Summaries the lesson	-Summaries the lesson -Assign home work.
II. To develop competencies among teachers for development, preparation and utilization of instructional material.	-Utilise community resource -Operation hand work (TV/Radio)	-Demonstrate experimental -Utilise community resources -Develop learning activitries on competencies in each subject. -Apparition hard work.
III. To make teachers able to motivate primary children for education and cultural activities	-Manage the disciplinal	-Establish rapport with Primary students. -Manage the class room discipline.
IV. To develop communication abilities among teachers in classroom.	-Recite a poem	-Narrate a story -Conduct role play
V. To enable teachers to use different methods of instruction	-Provide experience based teaching	-Provide experience based teaching. -Conduct oral drill exercise -Adopt play way method -Adopt concept attainment approach.

VI. To develop competencies in classroom management.		-Manage the learning environment.
VII. To develop teachers competencies for institutional planning	-Undertake self-evaluation	
VIII. To acquaint teachers with various innovation and significant areas of quality education at elementary stage	-Value education -Action research -Subject up gradation in different areas with special reference to English and Science -Physical education -Linking curriculum transaction with culture and environment of school children.	-Value edcation -Action reseafch -Subject up gradation in different areas with special reference to English and Science -Physical education -Linking curriculum transaction with culture and environment of school children.

III. Learning activities to be incorporated in in-service education programmes:

A. -Attending lectures

-Observing demonstration lesson given by tutors.

-Participating in question-answer sesson.

B. -Observation laboratory demonstration

-Conducting projects

-Conducting exhibition

-Participation computer aided instruction

-Conducting laboratory activities

-Visiting   a-   Model School

             b-   Historical place

             c-   Rehabilitation center

             d-   Educational guidance

             e-   Research centers

             f-   Library and laboratory

C. -Participating in group discussion

-Participating in seminar, symposium and debetes

-Participating in workshop

-Preparing learning aids

-Preparing question papers

-Oraginising quiz programmes

D. Participating in self-study activities relating to

-Problem solving.

-Using Printed self-study materials.

-Using available audio-video media for self study

Methods and media to be incorporated in in-service education programmes:

Organisation of various methods and approaches related to classroom activities and self-studies read as:

-Lectures

-Demonstration

-Experiment

-Project

-Community

-Seminars, symposiums

-Self study

-Micro teaching

-Models of teachings

Besides above there must be provisions for use of different media and materials such as:

-Using audio-visual cassettes

-Using the VCP/VCR

-Using the TV

-Using the Radio

-Radio conferencing

-Tele conferencing

-Computer network at wider level as well as local level

-Provision of self-study materials

Quality of Resource persons of In-service education programmes:

-Experienced and qualified teachers with special reference to subject like English languages and Science.

-Social workers like Economist and planners

-Other profession in the community like Doctors, Lawyers and retired persons (teachers and others)

-Educational administrators

-Teachers Experts

-Creative writers

Formative and Summative Evaluations and Follow-up Activities of In-service Education Programmes

A.   -Provisions for feed back through overall discussion - provision for feedback given through written form

B.   -Provision for reinforcing curricular activities-Provision reinforcing to participate in co-curricular activities

-Motivation to Join various in-service education programmes.

C.   Conducting Evaluation Through

   -Self assessment

-Paragraphs

-Overall discussion

-Observation and participating different activities

Conducting follow-up through

Seeking opinion of participants, School Head masters, School inspectors.

GRAPH NO. 1
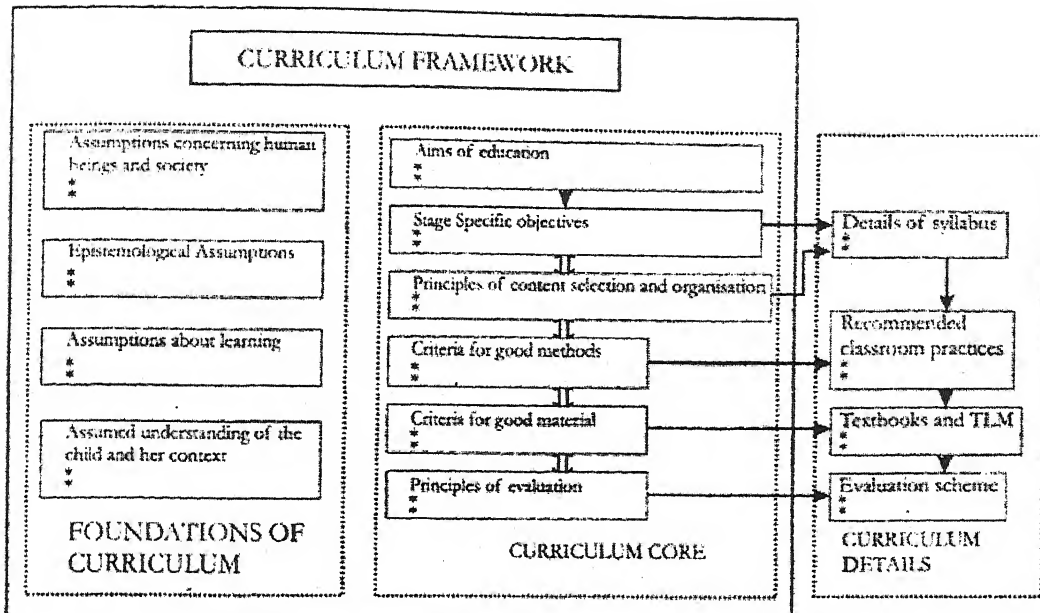
The Graphical Representation of Curriculum Framework

GRAPH NO. 2

GRAPH NO. 3

Panchayat Bodies	Educational Administration	Project Manag. In Selected districts


```
District Panchayat          District Education          District Project
Standing Committee   ───    Officer                ───  Coordinator
        │                        │                          │
        ▼                        ▼                          ▼
Block Panchayat             Block                       Block
Standing Committee   ───    Education Officer      ───  Resource Centre
        │                        │                          │
        ▼                        ▼                          ▼
Village                     Assistant                   Cluster
Panchayat                   Education Officer            Coordinator
        │                        │                          │
        ▼                        ▼                          ▼
Village Education Committee  ◄───────  Village Education Committee/
                                       Mother-Teacher Council
```

GRAPH NO. 4

Overlaps and Ambiguities in Functions:

11th Schedule	Gram Panchayat	Taluk Panchayat	Zilla Panchayat
Education, including primary and secondary schools	Promotion of public awareness and participation in primary and secondary education Ensuring full enrolment and attendance in primary schools	Promotion of primary & secondary education Construction, repair and maintenance of primary school buildings Promotion of social education through youth clubs and Mahila Mandals	Promotion of educational activities in the district, including establishment and maintenance of primary and secondary schools Establishment and maintenance of ashram schools and orphanages Survey and evaluation of educational activities
Technical training and vocational education		Promotion of rural artisan and vocational training	Establishment and maintenance of rural artisan and vocational training centres Encouraging and assisting rural vocational training centres
Adult and non-formal education	Promotion of adult literacy	Implementation of adult literacy	Planning and implementation of programme of adult literacy and non formal education

Chapter- 6

CONCLUSION

6.1 Findings, Summary and Conclusion

6.2 List of Appendices

6.3 Bibliography

6.4 Boxes

6.5 Questionnaire

FINDINGS, SUMMARY AND CONCLUSIONS

The purpose is to study the competency of school teachers towards school environment, teacher-student relations and values. Schools environment, teacher-student relations, values are the three important dimensions of education. competency of teachers towards school environment, teacher-student relations and values play a vital role in a teaching-learning process. The State is finding its way to strengthen school education by expanding its wings to provide higher order of intellectual and moral values to the students in the classroom for shaping them as better citizens so as to remove the crisis in the present social order. The forty-sixth session of the Internatinal conference on education took place from 5th to 8th September 2001 in Geneva on the theme of learning to live together', just before September 11, attacks on United States of America categorically stated the importance of these dimensions in education.

The present attempt is to study the teacher's competency.

The Following are the Objectives of The Study :

1. To study the competency of teachers towards *school environment* with regard to a) academic discipline and surrounding environment, b) availability of facilities, c) curricula and syllabi, d) examinations and e) teaching profession and their future.

2. To study the competency of teachers is regard to freedom, discipline and confidence, teacher and student interactions in

the classroom, motivation factors, student preparation and achievement, frequency of monitoring homework and progress, rewards and punishment, emotional behaviour, misbehaviour and indiscipline, pervasive caring, intermingling of boys and girls, expectations from the students and expectations from the teachers.

3. To study the preferences of teachers competency with regard is comfortable life, an exciting life, a world at peace, equality, family security, freedom, happiness, pleasure, self-respect, social recognition, true friendship and wisdom. b) *instrumental values-* ambitious broadminded, capable, courageous, forgiving, helpful, honest, independent, intellectual, obedient, polite and responsible.

4. To study the influence to Forecasting needs a) academic qualifications, b) professional qualifications, c) designation, d) teaching experinece, and e) place of residence of the school teachers on the items of school environment.

5. To study the influence of the selected variables : a) sex, b) marital status, c) academic qualifications, d) professional qualifications, e) designation, f) teaching experience, and g) place of residence of the teachers on the items of curriculum and syllabi.

    As already started, the purpose of this research is to study competency of teachers towards school environment, teacher student relations and values. Also, the study considered the competency of

male and female teachers; teachers eith HSC/PUC/Intermediate, graduate and post-graduate qualificatins; teachers with SGT/TTC. B.Ed. and M.Ed. qualifications; Primary grade teachers, school; teachers with 1-2 years of experience, 3-5 years of experience, 6-10 years of experience and above 10 years of teaching experience; and teachers residing in rural & urban area towards school environment and teacher competency.

Tool :

The questionnaire included :

Section I : personal data, such as name, sex, marital status, academic qualifications, professional qualifications, designation, teaching experience, and place of residence.

Section II : *An inventory on school environment* to study the competency of the theachers towards school administration. It included 50 statements related of different district of Bundelkhand Region.

Section III : *Minnesota teacher attitude inventory* (MTAI) to study the competency of teachers towards school education. It included 70 statements related to different areas teacher competencies.

Section IV : *Research Value-Survey (RVS)* with two parts each part with 12 set of values of study the competency of teachers towards values.

Sample :

A sample of 400 teachers was selected from 90 school for the collection of the date for study. Random sampling method was adopted. The sample included teachers working in urban and rural areas. It included primary grade teachers. The sample also included teachers of different academic and professional qualifications, teaching experience and place of residence.

Statistical Tehniques :

The study employed the following statisitical techniques :

i)   Product moment of coefficient of correlation (to study The trained and untrained teachers).

ii) Percentages

iii) Chi-square test and

iv) median rankings

The data analysed ion the IV and V chapter presented in the trained and untrained teachers.

Findings of The Study :

The major findings of the study constituted five areas : i)School environment ii) teacher competency iii) values iv) variables based study related to school and v) variables based study related.

The Major Findings of The Stduy on School Environment :

*   The competency of teachers revealed that more than one-third of the schools are not protected from heat, cold of rain and not airy, healthy, and attractive. One-third of the schools are situated

in quite noisy surrounding and found with spoiled environment. More than half of the teachers felt that the system of education is defective and they are sticking to it against their will and wish.

* The competency of teachers dislosed that more than half of the schools are not provided with adequate facilities like staff rooms, audiovisuals aids, library, laboratory facilities, playground and a good audiotorium. More than half of the teachers felt difficulty in teaching due to non-availability or improper maintenancne of black board. However, the teachers in these schools are willing to improve the schol environment and did not feel shy of confessing the existing school environment.

* The teachers expressed to need to reviewing the curriculam and syllabus giving due importance to the teacher's beliefs. The competency of the teachers further revealed discrimination and improper distribution of syllabi and time-table. One-third of the teachers confessed that they are not competent in teaching the syllabus allotted to them. A positive sign of the situation is that a majority of teachers are confident of fulfilling their responsibilities of teaching with appropriate changes in curricula.

* A majorityof trained and untrained teachers were very sad over the irregularities committed during examinations and the system of examinations followed in practice due to which the teachers are unable to pay proper attention to all round development of the students.

* A majority of trained and untrained teachers felt that teaching profession holds better prospect to serve and change the society. Also, a majority of teachers rejected the idea of dullness in their life and are not worried about their future and are confident of overcoming all odds to realise their values and ideals. However, they felt that other profession are better than teaching profession from financial angle and even then they rejected the idea of shifting to other professions.

The Major Findings of the Study on Teacher Competency :

* Most of the teachers felt that : i) almost all the students were obedient to them and they were, to large extent thoughful ii) students should be given more freedom in the process of their learning as they behaved in more civilized manner than many adults iii) students need more preparation at home and the expected more help from teachers iv) success is found to be more motivating than failure among the students and most of the teachers are positive towards grading of the students in the class because of competitive) some students ask many questions showing their interest and enthusiams and students, in general, regards their teachers as being resourceful and well informed vi) aggressive students are the greatest problem and they need more attention.

* A majority of the trained and untrained teachers felt that : i) unquestioning obedience among the students is not desirable

but all the same, students have to obey the teachers in general way and that student's companionship should be carefully supervised as students have a natural tendency to be unrully ii) minor disciplinary situations should be sometimes needed to be turned into jokes iii) discipline problems are the teacher's greatest worry but keeping the students disciplined is not a problem for them iv) most students do not make adequate effort to prepare their lessons and the students are lacking in productive imagination v) standards of work should vary with the students capabilities and a good motivating force for them is the critical comparison of students works with each other.

* A majority of trained and untrained teachers felt that : i) students are usually too sociable in the classroom ii) teachers usually are not harsh in dealing with students iii) students who misbehave should be made guilty and ashamed of themselves iv) whims and impulsive desires of students are usually worth their attention v) low achievement of students is on account of their not working hard, there are many activities lacking the academic respectabiity that is being introduced into the curriculum and students who fail to prepare their lessons daily should be kept after school hours to make up them.

* A majority of teachers felt that : i) students are not mature enough to make their own decisions but they are as good as any past generation and that they would think for themselves, if they are

permitted and they should always be made fully aware of what is expected from them ii) teachers can sometimes be wrong like students, every student has the right to disagree openly with the teacher and lack of application is probably one of the most frequent causes for failure.

* More than half of the teachers felt that : i) teaching never gets monotonous, teachers should never leave the class to its own management as classroom rules and regulations must be considered inviolable and a student found writing obscene notes should be severely punished ii) assigning have work is often an effective means of punishment, it is sometimes good to criticize students in the presence of toher students and it easier to correct discipline problems than to prevent them iii) the students should be given more freedom than they usually get and students are so likeable that their shortcomings can be overlooked and found that students' wants are as important as those of adults, iv) most students are resourceful when left on their own and most students make things easier for them.

* Some of the teachers felt that : i) most students are not interested in learning and students who are unable to meet the standards of the school should be dropped out ii) teachers should not be expected to do more work than he is paid for it and most teachers do not give sufficient explanation in their teaching iii) students can be boring sometimes and there is nothing that can be more

irritating than the behaviour of some students iv) there is too much intermingling of the difference in extra-curricular activities.

* Some of the teachers disagreed with the judgement that the teachers should not place much faith int he statements of the students and that the students should be taught to obey adults without questioning. Some of these teachers also felt against exercising of more authority over the students.

* The competency of teachers are divided 'for and against' the dimensions of teacher-students relations in respect ofthe students do not appreciate the teachers who do things for them, the teachers should never discuss sex problems with the students, the students should ask questions about sex and one should not expect students to enjoy the school.

* 13 per cent of the dimensions of teacher-conmpetency are mostly agreed by the teachers. 35 per cent of the competency are more agreed by the teachers. Teachers are in general agreement with 26 per cent of the competency. A low level of agreement is found with regard to 12 per cent of competency. A dis-agreement is observed with regard to 14 per cent of the dimensions of teacher-relations.

The Major Findings of The Study on Values :

* The more preferred terminal values are in the order of : 1. A world at peace (Free of war and conflict) 2. Freedom (Independence, free choice) 3. A comfortable life (A Prosperous

life) and Equality (Brotherhood, equal opportunity for all) 4. Wisdom (A mature understanding of life.

* The less preferred terminal values are in the order of : 1. Happiness (Contentedness) 2. Family security (Taking care of loved ones) and Self-respect (Self esteem) 3. True Friendship (Close companionship) 4. Pleasure (An enjoyable, leisurely life).

* The value system of the teachers for terminal values is found in the order of 1. A world at peace (Free of war and conflict) 2. Freedom (Independence, free choice) 3. Equality (Brotherhood, equl opportunity for all) and A comfortable life (A Prosperous life) 4. Wisdom (A mature understanding of life) 5. An existing life (A stimulating, active life) and Social recognition (Respect, admiration) 6. Pleasure (An enjoyable, leisurely life) 7. True Friendship (Close comapnionship) 8. Family security (Taking care of loved ones) and Self respect (Self esteem) 9. Happiness (Contentedness).

* The more preferred instrumental values by the teachers are : 1. Honest (Sincere, truthful) 2. Independent (Self-reliant, Self-sufficient) 3. Courageous (Standing up for beliefs) 4. Ambitin (Hardworking, aspirint), Capable (Competent, effective) and Intellectual (Intelligent, reflective)

* The less preferred instrumental values by the teachers are : 1. Broadminded (Open minded) 2. Helpful (Working for the welfare of others) 3. Responsible (Dependable, reliable) 4. Forgiving

(Willing to pardon others), Obedient (Dutiful, respectful) and Polite (Courteous, well-mannered).

* The value system of the teachers for instrumental values is found in the order of : 1. Honest (Sincere, truthful) 2. Independent (Self-reliant, self-sufficient) 3. Courageous (standing up for beliefs) 4. Ambition (Hard working, aspiring), Capable (Competent, effective) and Intellectual (Intelligent, reflective) 5. Forgiving (Willing to pardon others), Obedient (Dutiful, respectful) and Polite (Couteous, Well-mannered) 6. Responsible (Dependable, reliable) 7. Helpful (Working for the welfare of others) 8. Broadminded (Open minded).

The Major Findings of the Study of Influence of Selected Variables on School Environment

* The variables professional qualifications, designation, teaching experience and residence of the teachers had no significant influence on most of the items of school environment. And, the variables status, academic qualifications of teachers had not significant influence on a majority of the items of school environment.

* Female teachers are found to be more efficient than male teacher. Because, female teachers did not think that the curriculum they have to teach is not too lenghty to be covered in the specified time. Further, female teachers are also found to be relatively less financial oriented and more confident of thier fitness towards teaching profession than male techers.

* Techers are perturbed more compared to teachers. Truth teachers felt ore difficulty in maintaining discipline on account of large number of students in the class than teachers. They felt more that their school are situated at such places where the environment is quite noisy. When compared to Untrained teachers Trained teachers felt more that the existing system of examination does not help in the proper evaluation of the students' performance. Also, they are more unhappy over not paying proper attention to the all round development of students because of more examination orientation of the studies, unfair means in the examinations and exessive carelessness shown by eaaminers in valuating the answer books.

* Teachers possessing graduation and post-graduation qualificatins ar eless efficient in maintaining discipline on account of large number of the students in the calss when compared to the teachers possessing HSC/PUC/Intermediate qualifications. Teachers with lower academic qualifications felt shy of showing their school environment to the outsiders. Whereas, teachers with post-graduation are more concerned about the inadequate provision of audio-visual material in the school, non-existence or improper functioning of the school library, laboratory and lack of a good auditorium in the school.

* Teachers with higher academic qualifications criticized the examination system and valuation more compared to the teachers

with lower academic qualifications Trained and Untrained Teachers with higher academic qualifications are more vehement in their criticism of the examination and valuation system when compared to the teachers with lower academic qualifications (post-graduation> graduation> HSC/PUC/Intermediate). Teachers with lower academic qualification felt that the life has become dull on account of being teachers. Also, the desire of changing the society is more among the teachers with higher academic qualifications. Further, these teachers felt that teaching profession provides more opportunities for serving the society and nation at large than other professions.

* M.Ed. degree holders felt more that teaching profession provides them more opportunities than other professions for serving the society or nation than teachers with other professional qualificatins.

* Primary grade teachers felt more difficulty in teaching due to non-availability or improper maintenance of black boards. They felt more about non-existence of proper place in the school to sit and work and they are more dissatisfied with the non-existence, improper functioning of school library and laboratory compared to other teachers. The school assitants felt more of their incompetence of teaching the syllabi and injustice int he preparation of time table than other teachers. While, secondary grad teachers felt more that there are a number of irregularities in prescribing the text books.

* Teachers with 3-5 years experience felt more that the schools are situated at such a place which makes its environment quite noisy than teacher with less and more experienced that these teachers. Teachers with 6-10 years of experience felt more often to improve school environment than teachers with less and more experienced thatn these teachers.

* Teachers residing in Bundelkhand areas felt more about need of proper play ground facilities. While, teachers residing in areas felt more about the need of a good auditorium. Teachers residing in rural areas felt more about the existing system of examination which does not help in the proper evaluation of the students' performance and they are more petturbed over the irregularities committed by the fellow teachers, supervisors and centre superintendents.

The Major Findings of The Study of Influence of Selected Variable on Teacher- Competency

* The variables-Trend status, designation, teaching experience and residence of the teachers had no significant influence on most of the items of teacher-competency. And, the variables-academic qualifications, professional qualifications of teachers had no significant influence on a majority of the items of teacher-student relations.

* Female teachers are inclined dto give more freedom to the students in the classroom, award of grades rather than marks

and give schoolwork, which can be done by all students. Also, female teachers are found to be more positive towards accepting the students even if they are not aware of what is expected of them. Further, they have larger group interest. While, male teachers are less committed to give sufficient explanation in their teaching and inclined towards giving schoolwork based on student's interest.

* Untrained teachers are more satisfied with the obedient of the students and also with the appreciation of the students for thier efforts. Further, these teachers aloso feel that the studetns need not obey them blindly, a healthy tendency to accept any type of criticism by the students. While Trained teachers have both amusing and controlling potential in the classroom situation. Untrained teachers are not worried about the freedom given to the students and do not feel bad in giving more support to the students.

* Trained and Untrained teachers felt more about the discipline and freedom of the students in the classroom and also they worry about the behaviour of some students and the need of giving attention to aggressive students' behaviour. Also, these teachers favoured for adopt in of procedures to feel guilty and ashmed of their misbehaviour of the students and giving reasons for change of such behaviour. Further, they felt that more freedom is to be given to the students for their success.

* Untrained techers preferred prevention of indisciplinary situations than to correct it. These teachers favoured universal promotion of students and felt that efforts and scholarship of students should be considered in students' appraisal. They also felt that students are unable to reason adequately and that they need more freedom than they usually get in the classroom. Further, the untrained teachers felt that there need not be too much intermingling of boy and girl students in the extra curricular activities.

* Teachers with post-graduation felt more that the students are required to study at home. Teachers with graduation felt that a teachers should never discuss sex problems with the students. However, teachers with post-graduation agreed less with the same. Teachers with HSC/PUC/Intermediate qualification agreed less with the dimension that the students expect a lot of help from the teacher in getting their lession done.

* Teachers with post-graduation expressed that most students do not make an adequate effort to prepare their lession. While, teachs with HSC/PUC/Intermediate qualification agreed less with the above dimension. Teachers with post-graduation felt that student's wants are just as important as those of an adult and students have a natural tendency to be unruly and some students ask many questions. Teachers with post-graduation felt that success is more motivating than failure. Teachers with graduation

felt that teachers should exercise more authority over their students thatn they usually do.

* Teachers with post-graduation felt more that the students who fail to do home work daily should be kept after school to make them to do the same. Teachers with post-graduation felt that dishonesty as found in cheating is probably one of the most serious of moral offences, the students should be allowed more freedom in their learning activities and students usually are not able to select their own topics for any report. Further, they felt that students are unable to reason adequately and the student who misbehaves should be made to feel guilty and ashamed of himself. While, the teachers with HSC/PUC/Intermediate qualification agreed less eith and a teacher should never leave the class to its own management than the teachers with graduatiion and post-graduation qualifications.

* Teachers with graduation felt more than the students just cannot be trusted compared to teachers with post-graduation and HSC/PUC/Intermediate qualification. While, teachers with HSC/PUC/Intermediate qualification agree less with the idea that there is free intermingling of the sexes in extra-curricular activities. Finally, teachers with post-graduation felt that keeping discipline is not the problem that many teachers claim it to be.

* Teachers with SGT/TTC qualification felt mroe that if the teacher laughs with the students in amusing classroom situation,

the class tends to get out of control and the teacher is usually to be blamed when students fail to follow directions compared to teachers with B.Ed. and M.Ed. qualifications. While, teachers with M.Ed. qualification felt that student's wants are just as important as those of an adult. Teachers with B.Ed. qualification felt more that some students ask too many questions. However, teachers with SGT/TTC qualification had an outlook that the teacher should not be expected to manage a student if the latter's parents are unable to do so.

*   Teachers with M.Ed. qualification disagree more with the idea that most students lack productive imagination and success is more motivating than falure. Teachers with B.Ed. qualification felt more that dishonesty as found in cheating is probably one of the most serious of moral offences whereas, teachers with M.Ed. qualification are not that much concerned about the same. While teachers with B.Ed. and M.Ed. qualification felt more about the inability of the students to reason adequately.

*   Teachers with SGT/TTC qualification are not that much concerned about the permission to be taken by the students when they want to speak or to leave their seat at the time of teaching. While teachers with B.Ed. qualification felt more that the students should respect teachers and should not treat him as a mere adult. Teachers with M.Ed. qualification felt more than teachers with B.Ed. qualification that severe punishment

should be given to the students who throw chalk and erasers in the class whereas, teachers with SGT/TTC are not that much concerned about the sam.e Teachers with SGT/TTC qualification felt that most studetns are considereate of their teachers. Also, these teachers felt that the students couldn't think for themselves if they are permitted.

* Post-graduate teachers expressed favourably that most students appreciate what a teachers does for them and students need not be required to do more studying at home compared to secondary grade teachers and school assistants. Post-graduate teachers felt that a teacher should never discuss sex problems with the students, while secondary grade teachers agreed less with the same dimension.

* Secondary grade teachers and school assitance felt that the students are too much carefree. While, secondary grade teachers and post-graduate teachers felt that the whims and impulsive desires of students are usually worthy of attention. Post-graduate teachers are inclined towards the idea that students should not show excessive respect towards teacher any more than any other adult. While, school assistants agree less with the same. Also, school assitants are inclined less towards the dimension that students should be given more freedom in the classroom. Post-graduate teachers favoured the idea that the students should always to fully aware of what is expected of them.

* Teachers with 1-2 years of experience are less inclined towards the idea that the students expect a lot of help from the teacher in getting their lesson done. Further, they felt least that teachers are to be blamed when students fail to follow directions compared to teachers with more experience. Teachers with 6-10 years and above 10 years of experience favoured the idea more that a good motivating device is the critical comparison of the student's work with that of the other students. Teachers of below 10 years of experience have the concept that a teacher should always have at least a few failures. Whereas, teachers with above 10 years of experience felt that the students are too carefree.

* Teachers with 1-2 years of experience favoured that throwing of chalk and erasers by the students should always demand severe punishment. Further, teachers with 1-2 years of experience favoured more about the need of grading among the students. It is interesting to note that the teachers with 1-2 years and above 10 years of experience felt that students are so lovable that their shortcomings can usually be overlooked. The preference of the teachers to punish the students when they are found writing obscene notes and also to drop the students who cannot meet the school standards are of the order : 1. above 10 years of experience 2. 10-6 years of expreience 3. 3-5 years of experience 4. 1-2 years of experience.

* Teachers residing in different area in Bundelkhand region area did not feel that if the teacher laughs with the students in amusing classroom situation, the class tends with the ideas that most students lack productive imagination, students should be seen and not heard and difficult disciplinary problems are seldom the fault of the teacher. Teachers residing in urban area had least bothered that the academic work allotted to the students should vary with their potentialities. Teachers residing in rural area are less inclined to the idea that aggressive students are more problematic. However, teachers residing in urban area are inclined more towards the same idea. Teachers residing in rural area are willing to give more freedom in the classroom. Even then, they felt that teachers are too lenient with their students and regulations must be considered inviolable.

* Teachers in rural area did not agree that much with the concept that students are so lovable and their shortcomings can usually be overlooked compared to teachers residing in urban areas. Teachers residing in tribal area mostly believe that students can be trusted compared to teachers residing in urban and rural areas.

Summary and Conclusions :

Teachers's competancy revealed that a significant quantity of the schools are not provided with proper surrounding environment and facilities congenial for teaching. However, the teachers in these schools are willing to improve to school environment and did not feel

shy of confessing the existing school environment. A positive sign of the situation is that a majority of teachers are confident of fulfilling their responsibilities of teaching with appropriate changes in curricula giving due importance to the teachers' beliefs. A majority of teachers were very sad over the irregularities committed during examinations and they system of examinations followed in practice due to which the teacher s are unable to pay proper attention to all round development of the students. It is encouraging to note that a majority of teachers felt that teaching profession holds better prospect to serve and change the society. Also, a majority of teachers rejected the idea of dullness in their life and are not worried about their future and are confident of overcoming all odds to realise their values and ideals. However, a majority of teachers felt that other professions are better than teaching profession from financial angle and even then they rejected the idea of shifting to other professions.

Hence, it is concluded that the overall scenario of *school environment* is not satisfactory with regard to surrounding environment, availability of facilities, curricula and syllabi, conduct of examinations. However, the teachers are optimistic in their profession and future.

Teacher's competency revealed that almost all the students were obedient to them and they were, to a large extent thoughtful. More freedom is to be given to the students and also they need more preparation at home. Success is found to be more motivating than failure in students. However, some of the students are more enthusiatic

to learn from the teachers. Teachers felt that the more attention is required in case of aggressive students and teachers should be more serious about the conduct of the students. However, teachers are very much worried about slow learners.

Teacher's competency revealed that unquestioning obedience among the students is not desirable but all the same, students have to obey the teachers in general way and that students' companionship should be carefully supervised as students have a natural tendency to be unruly. Minor disciplinary situations should be sometimes needed to be runed into jokes, as felt by the teachers and keeping the students disciplined is found to be not a problem for them. Teachers felt that the standards of work given to the students should vary with the students' capabilities and a good motivating force for students is the critical comparison of students' works with each other. Teachrs felt that students are usually too sociable int he classroom and teachers liked best by students probably had better understanding of the students. Teachers usually are not harsh in dealing with students. Further, teachers felt that students should be told what to do and how to do. Teachers felt that universal promotion of students lowers achievement and low achievemnet of students is because of not working hard. Also, teachers felt that many actitivies lacking the academic respectablity that is being introduced into the curriculum and students who fail to prepare their lessons daily should be kept after school hours to make up them. Teachers agreed that teachers can sometimes

be wrong like students and every students has the right to disagree openly with the teacher.

Teachers felt that assigning additional work is often an effective means of punishment; it is sometimes good to citicize students having too high an opinion of themselves in the presence of other studnets; it is easier to correct discipline problems than to prevent them. They felt that students are so likeable that their shortcomings can be overlooked. Teachers agreed that students' wants are as important as those of adults and most of the students are resourceful when they are left on their own and that is how they make things easier for tachers.

But, some of the teachers felt that most students are not interested in learning and students who are unable to meet the standards of the school should be dropped out. Further, they expressed that the teachers should not be expected to do more work than he is paid for it. Some of the teachers also felt that most teachers do not give sufficient explanation in their teaching. Some of the teachers felt that students can be boring sometimes and there is nothing that can be more irritating than be behaviour of some students. Some of the teachers felt that there is too much intermingling of the quality in extra-curricular activities. Some of the teachers disagreed with the judgement that the teachers should not place much faith in the statements of the students and that the students should be taught to obey adults without questioning. However, some of these teachers also felt against

exercising of more authority over the students. Teachers' competency are divided 'for and against' a very few dimensions of teacher-student relations in respect of : the students do not appreciate the teachers who do things for them; the teachers should never discuss sex problems with the students; the students should ask questions about sex; one should not expect students to enjoy the school.

Hence, it is concluded that a majority of teachers' competency are found to be more positive towards *teacher-student relations* with regard to freedom, discipline and confidnece, teacher and student interactions in the classroom, motivation factors, student preparation and achievement, frequency of monitoring homework and progress, rewards and punishment, emotional behaviour, misbeahviour and indiscipline, expectations from the students. Views of teachers are differed with regard to expectations from the teachers, pervasive caring and intermingling of boys and girls.

The more preferred terminal values of the teachers are in the order of : 1. A world at peace (Free of war and conflict) 2. Freedom (Independence, free choice) 3. A comfortable life (A Proserous life) and Equality (Brotherhood, equal opportunity for all) 4. Wisdom (A mature understanding of life). The less preferred terminal values are in the order : 1. Happiness (Contentendness) 2. Family security (Taking care of loved ones) and self respect (Self esteem) 3. True Friendship (Close companionship) 4. Pleasure (An enjoyable, leisurely life).

The value system of the teachers for terminakl values is found in the order of : 1. A world at peace (Free of war and conflict) 2. Freedom (Independence, free choice) 3. Equality (Brotherhood, eqaual opportunity for all) and A confortable life (A Prosperous life) 4. Wisdom (A mature understanding of life) 5. An existing (A stimulating, active life) and Social recognitiion (Respect, admiration) 6. Pleasure (An enjoyable, leisurely life) 7. True Friendship (Close companionship) 8. Family security (Taking care of loved ones) and self respect (Self-esteem) 9. Happiness (COntentedness).

The more preferred instrumental values of the teachers are in the order of : 1. Honest (Sincere, truthful) 2. Independent (Self-reliant, Self-sufficient) 3. Courageous (Standing up for beliefs) 4. Ambition (Hardworking, aspiring), Capable (Competent, effective) and Intellectual (Intelligent, reflective). The less preferred instrumental values by the teachers are : 1. Broadminded (Open minded) 2. Helpful (Working for the welfare of others) 3. Responsible (Dependable, reliable) 4. Forgiving (Willing to pardon others), Obedient (Dutiful, respectful) and Polite (Courteous, well-mannered).

The value system of the teachers for instrumental values is found int he order lf : 1. Honest (Sincere, truthful) 2. Independent (Self-reliant, self-sufficient) 3. Courageous (Standing up for beliefs) 4. Ambition (Hard working, aspiring), Capable (Competant, effective) and Intellectual (Intelligent, reflective) 5. Forgiving (Willing up pardon others), obedient (Dutiful, respectful) and Polite (Courteous, well-

mannerd) 6. Responsible (Dependable, reliabel) 7. Helpful (Working for the welfare of others) 8. Broadmined (Open minded).

Hence, it is concluded that teachers are found to be at higher level of social consciousness as they preferred world at peace and freedom and are not much concerned about their happiness and family security. They preferred to be honest, independent and courageous but not broadminded and least helpful.

Female teachers are found to be more efficient than male teachers. Becuase, female teachers did not think that the curriculum they have to teach is not too lengthy to be covered in the specified time. Further, female teachers are also found to be relatively less financial oriented and more confident of their fitness towards teaching profession than male teachers. Trained teachers are perturbed more compared to Untrained teachers. While, Trained teachers felt more difficult in maintaining discipline on account of large number of students in the calss than Untrained teachers. Trained teachers are more unhappy over not paying proper attention to the all round development of students because of more examination orientation of the studies, unfair means in the examinations and excessive carelessness shown by examiners in valuating the answer looks. It is noteworthy that teachers possessing graduation and post-graduation qualifications are less efficient in maintaining discipline on account of large number of the studnets in the class compared to the teachers possessing HSC/PUC/ Intermediate qualification. Teachers with lower academic qualificatins

felt shyer of showing their school environment to the outsiders. Whereas, teachers with post-graduation are more concerned about the inadequate provision of audio-vidual material in the school, non-existence or improper functioning of the school library, laboratory and lack of a good auditorium in the school. Teachers with higher academic qualifications are kore vehement in their criticism of the examination and valuation system when compared to the teachers with lower academic qualifications. The desire of changing to society is more among the teachers with higher academic qualifications. Further, these teachers felt that teaching profession provides more opportunties for serving the society and nation at large than othr professions. The school assitants felt more of their incompetence of teaching the syllabi. While, secondary grade teachers felt more that there are a number of irregularities in prescribing the next book. Teachers with 3-5 years experience felt more that the schools are situated at such a place which makes it environment quite. noisy. Teachers with 6-10 years of experience felt more often to improve school environment. Teachers residing in rural areas felt more about the existing system of examination which does not help in the proper evaluation of the students' performance and they are more perturbed over the irregularities committed by the fellow teachers, supervisors and centre superintendents.

Hence, it is concluded that the variables- sex, professional qualifications, designation, teaching experience and residence of the

teachers had no significant influence on most of the items of school environment. The variables-marital status, academic qualifications of teachers had no significant influence on a majority of the items of school environment.

Teachers with graduation felt more that a teacher should never discuss sex problems witht he students. Teachers with post-graduation felt more that students do not make an adequate effort to prepare their lessons. Teachers with graduation are more inclined towards the dimension that teachers should exercise more authority over their students than they usually do. Teachers with SGT/TTC qualifications felt more that if the teachers laughts with the students in amusing classroom situation, the class tends to get out of control. While, teachers with M.Ed. qualification felt that student's wants are just as important as those of an adult. Teachers with B.Ed. qualification felt more that some students ask too many questions and the students should respect teacher and should not treat him as a mere adult. Teachers with 1-2 years of experience are less inclined towards the idea that the students expect a lot of help from the teacher in getting their lesson done. Teachers with 6 years of experience and above favoured the idea more that a good motivating device is the critical comparison of the student's work with that of the other students. It is interesting to note that the teachers with 1-2 years and above 10 years of experience felt more that students are so lovable that their shortcomings can usually be overlooked. Teachers residing in rural

area did not feel much that if the teacher laughts with the students in amusing classroom situation, the class tends to get out of control. Further, they did not agree with the ideas that most studennts lack productive imagination. Teachers residing in urban area had least bothered that the academic work allotted to the students should vary with their potentialities. Teachers residing in urban area are less inclined to the idea that aggressive students are more problematic. Teachers residing in urban area are willing to give more freedom to the students in the classroom and they felt more that students can be trusted compared to teachers residing in urban and rural areas.

Hence, it is concluded that the variables- sex, marital status, designation, teaching experience and residence of the teachers had no significant influence on most of the items of teacher competencies. The variables- academic qualifications, professional qualifications had no significant influence on a majority of the items of teacher-student relations.

Suggestions

The following are some of the important suggestions :

* There is a need to improve the environment of the schools avoiding noisy surroundings and the schools without adequate facilities like black boards, staff rooms, instructinal material, library and laboratory rooms and play ground facilities need to be provided with these minimum facilities.

* There is a need to work out effective procedures to involve teachers in framing of the curricula and syllabi and to find the effective mechanism to over come irregularities committed at the time of examinations. Teaching staff relations need to be improved to overcome improper distribution of syllabi and discrimination of periods in the time-table and there is a need to organize intensive in-service programmes to upgrade the knowledge of the teachers.

* There is a need to supervise student companionship as student hve a tendency to be unruly, activities are to be taken up to improve productive imagination of the students and standards of work to be given to the students should vary with the students' capabilities. Curriculum framework and teachers' activities need to look into these dimensions.

* Projects are to be assigned to students to strengthen their resourcefulness and direct their energies for productive works. Pre-service and in-service teacher education programmes have to be conducted to orient teachers to feel that they should take the burden of the students' problems to guide them.

* The students should also be kept after school hours to make up their backwardness and necessary mechanism is to be evolved as teachers are in favour of it. Teachers felt that assiging additional work to the students is an effective means of punishment than corporal punishment. Teachers with

authoritarian attitude should be discouraged and necessary orientation should be given to the teachers in this regard.

*   Teachers' Competency are least oriented towards open-mindedness and working for the welfare of others. Hence, orientation programmes and activities are to be taken up to enhance these values in the teachers.

*   Excessive examination orientation of studies made the teachers unhappy as they are unable to pay proper attention to all round development of personality of the students. Hence, there is need to remove the excessiveness of examination orientation of present studies and orient towards certain activities for personality development within the curriculum framework and enough weight age should be given to it in assessing students' performance.

The above practices with necessary commitment from educatinal policy makers and practitioners will certainly improve the school environment, teacher competency and values for a better social order.

Suggestions for Further Research

The scope of reasearch in school environment, teacher-competency and values is very wide. Different dimensions can be undertaken with regard to school environment. Teacher competency can be studied with regard to different levels of study right from school level to university level and also under different managements. Value preferences and value system of people of diffrent professions like

medicine, engineering, management etc. can be considered for further research.

The following suggestions are made for further research :

1. To study the competency of primary school teachers towards teacher-student relations and values.

2. To study the attitude of teacher educators towards teacher-student relations and values.

3. To study the attitude of high school students towards school environment and teacher competency

4. To compare the value preferences and value system of teachers and students at school level.

5. To study the values among school teachers of different Bundelkhand region to choose four districs (Jhansi, Jalaun , Lalitpur & Hamirpur).

6. To study the competency of teachers towards school environment, teacher-student relations and values working in residential schools.

LIST OF APPENDICES

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Appendix VI   Pre Independence Exemplar of Innovations in Education.

Proforma for Primary School of U.P.

PRIMARY SCHOOL INFORMATION OF JHANSI DISTRICT

YEAR	TEACHER STRENGTH	ENROLMENT OF STUDENT	NO. OF SCHOOL	POPULATION (6 to 11 yeears age group)	CLASS 5TH RESULT	
					PASS	TOTAL
1990						
1991						
1992						
1993						
1994						
1995						
1996						
1997						
1998						
1999						
2000						
2001						
2002						
2003						
2004						
2005						
2006						

PRIMARY SCHOOL INFORMATION OF HAMIRPUR DISTRICT

YEAR	TEACHER STRENGTH	ENROLMENT OF STUDENT	NO. OF SCHOOL	POPULATION (6 to 11 yeears age group)	CLASS 5TH RESULT	
					PASS	TOTAL
1990						
1991						
1992						
1993						
1994						
1995						
1996						
1997						
1998						
1999						
2000						
2001						
2002						
2003						
2004						
2005						
2006						

PRIMARY SCHOOL INFORMATION OF LALITPUR DISTRICT

YEAR	TEACHER STRENGTH	ENROLMENT OF STUDENT	NO. OF SCHOOL	POPULATION (6 to 11 yeears age group)	CLASS 5TH RESULT	
					PASS	TOTAL
1990						
1991						
1992						
1993						
1994						
1995						
1996						
1997						
1998						
1999						
2000						
2001						
2002						
2003						
2004						
2005						
2006						

PRIMARY SCHOOL INFORMATION OF JALAUN DISTRICT

YEAR	TEACHER STRENGTH	ENROLMENT OF STUDENT	NO. OF SCHOOL	POPULATION (6 to 11 yeears age group)	CLASS 5TH RESULT	
					PASS	TOTAL
1990						
1991						
1992						
1993						
1994						
1995						
1996						
1997						
1998						
1999						
2000						
2001						
2002						
2003						
2004						
2005						
2006						

Reaction Scale for Experts on In-Service training of Teachers.

I.   Kindly state what do you expect from DIET?

(Put tick mark against the alternative suits to your response)

		Most expected	Moderate expected	Least expected
1.	DIET will contribute towards improvement of teaching learning system of elementary education			
2.	As a nodal agency DIET will coordinate all concern agencies in district for development of elementary education			
3.	DIET will develop leadership qualities among teachers to solve problems of elementary educatiion at local level			
4.	DIET will guide teachers from time to time for improvement of elementary school system			
5.	DIET will provide quality in-service training for refreshing knowledge and improving skill of teaching amongst teachers			
6.	DIET will prove experience based training to teachers			
7.	DIET will enable to teachers to solve day to day problem			
8.	DIET will enable teachers to manage school system effectively with community support.			

II. **In your opinion activities organised during in-service training helped In-Service teachers to improve their :**

	Most expected	Moderate expected	Least expected
1. Communicatiion abilities			
2. Self confidence in dealing with complex problems of teaching			
3. Organisational skills.			
4. Content mastery in new subjects.			
5. Competency in using different methods of teaching			
6. Abiltiy to adopt innovations in school system			
7. Acquaintance with new technology in teaching-learning system.			
8. Skills of development of local specific audio-visual aids			
9. Skills of effective evaluation of learners' performance			

In your opinion what are other improvement perceived by you.

III. What is your perception of the quality of training programmes organised for in-service teachers by DIET. Please put tick mark against appropriate alternative against. following items :

	Most Adequate	Moderate Adequate	Least Adequate
1. The objectives of in-service training are relevant to the needs and problems of teachers			
2. Contents covered are relevant to the objectives of in-service training			

Any other please specify :

IV. To what extent to you find the venues of in-service teacher eduction programme is adequate.

	Most Adequate	Moderate Adequate	Least Adequate
(a) At DIET level			
(b) At block level			
(c) At school complex level			
(d) Other place approved by DIET			

Any other please specify :

V. To what extent do you find atmosphere in the class room of in-service teacher education programme in comfortable?

	Most Adequate	Moderate Adequate	Least Adequate
1. Sitting arrangement of class room			
2. Cleanliness of class room inside and outside			
3. Proper cross ventilation			
4. Availability of drinking water			
5. Lighting Space & Airy			
6. Facilities for using teaching aids in class room			

Any other please specify :

VI. To what extent do you find study materials provided for in-service teacher education programme are adequate?

	Most Adequate	Moderate Adequate	Least Adequate
1. Provision of study materials			
(a) Print based materials			
(b) Audio-Video cassettes			
2. Provision of Stationaries like writing note books, paper, files, pen etc:			
3. Provision of charts, maps and other learning materials			

Any other please specify :

VII. To what extant do you find laboratory facilities of in-service teacher education programme are adequate?

		Most Adequate	Moderate Adequate	Least Adequate
1.	Physicla facilities of experimentation			
2.	Availabilty of chemicals			
3.	Working conditions of equipments.			
4.	Use of locally available materials.			

Any other please specify :

VIII. To what extent following material are adequate available for in-service training in DIETs?

		Most Adequate	Moderate Adequate	Least Adequate
1.	Books related to the programme			
2.	Journals			
3.	Project reports			
4.	Access to library reading			
5.	Provision for mobile library			
6.	Teachers hand book			
7.	Supplementary books			
8.	Other reference to be used			

Any other please specify :

IX. To what extent do you find usefulness of different methods/activities used in -service teacher education programe are adequate?

Teachers Centered	Most Adequate	Moderate Adequate	Least Adequate
1. Method			
Lecture			
Demonstration			
Question answers			

Any other please specify :

2. Practical activities	Most Adequate	Moderate Adequate	Least Adequate
Demonstration			
Projects			
Conducting Exhibition			
Computer aided instruction			
Laboratory based activities			

Any other please specify :

3. Group activities	Most Adequate	Moderate Adequate	Least Adequate
Group discussion			
Seminar, symposium, debates			
Workshop			
Preparing of learning aids			
Preparation of question paper			
Quiz programe			

Any other please specify :

4. Self study activities	Most Adequate	Moderate Adequate	Least Adequate
Problem solving			
Using printing self study material			
Using available audio-video media			
for self study			

Any other please specify :

X. To what extent do you find the following learning experience are used for in service training :

	Most Adequate	Moderate Adequate	Least Adequate
1. Visiting the sites of educational significance			
2. Visiting the centers of exceptional children			
3. Visiting the Science Exhibition			
4. visiting the educational guidance and Counseling institution.			

Any other please specify :

XI. To what extent do you find use of different media used in service teacher education programme is adequate.

		Most Adequate	Moderate Adequate	Least Adequate
1.	Using Audio-Visual cassettes			
2.	Using VCP/VCR			
3.	Using T.V.			
4.	Using Radio			

Any other please specify :

XII. To what extent do you rate quality of resource persons of in-service teachers education programme adequate?

		Most Adequate	Moderate Adequate	Least Adequate
1.	Master Trainers			
2.	Teacher Educators			
3.	Social workers			
4.	Other community persons like craftsmen/artisans etc.			

Any other please specify :

XII. To what extent do you find the feedback mechanism in-service teacher education programme is adequate?

	Most Adequate	Moderate Adequate	Least Adequate
1. (a) Feedback given through overall discussion			
(b) Feedback given through written form			
2. (a) Reinforcing curricular activities			
(b) Reinforcing to participate in co-curricular activities			
(c) Motivating to join various in-service education programme.			

Any other please specify :

XIV. To what extent do you find means of evaluation (if any) in-service teacher eduction programme adequate?

	Most Adequate	Moderate Adequate	Least Adequate
1. Self assessment with the help of evaluation format			
2. Assessment by peer groups			
3. Assessment by overall discussion			
4. Assessment through observation for participating different activities			
5. No. examination/Assessment was conducted			

Any other please specify :

XV. **On the basis of your experiences kindly write a few observations on :**

(a)   Strength of In-service training organised by DIETs.

_____

_____

(b)   Weakness of In-service training organised by DIETs,.

_____

_____

(c)   Suggestions for improvement of In-service training by DIETs.

_____

_____

(i)   On course content.

_____

_____

(ii)   On nature of programme.

_____

_____

(iii) On physical facilties.

_____

_____

(iv) On methods of training.

_____

_____

(v)   On follow up of training.

_____

_____

(vi) Any other

_____

_____

Information Schedule of School

General Information of School

1. Name of the School : _____

2. Address of the School : _____

3. School level : _____

Upto III	Upto V	Upto VIII

4. Date of establishment of School : _____

5. Number of teachers including Head

   Master : _____

6. Number of Trained Teachers :

CT	Other Agency

7. School run by :

Govt.	B.Ed.

8. Total Student category upto Class-V :

   a.

Boys	Girls

   b.

General	S.C.	S.T.	O.B.C.

   c. Pass percentage at Class-V _____

9. Scholarship facility to students   :

   If yes howmany : _____

Yes	No

10. Whether school situated in

Urban Area	Semi-urban Area	Rural Area	Semi Rural Area

11. If in rural, distance from Nearest Town   :   _____ Km.

    Bus Stand   :   _____ Km.

    Railway Station   :   _____ Km.

12. Infrastructure :

    No. of class rooms_____

    (Put in tick mark)

    Building_____   Pucca/Kuttcha

    Whether use audio video aids   Yes/No

    Radio   Yes/No

    Electiricty facility   Yes/No

    TV Set   Yes/No

    Drinking Water   Yes/No

    Urinal   Yes/No

    Play-Ground   Yes/No

    Swimming-Pool   Yes/No

Background Information of the Teacher

1. Name of the Techer   :   Shri/Smt./Miss _____

2. Sex   :   Male/Female

3. Designation   :   Head Master/Asstt. Teacher

4. Name of the School   :   _____

5. Type of School

T.R.W. School	Govt. School	N.G.O. School

6. Qualification   :

   a. **General**

High School	Intermediate	Graduate	Post Graduate	M.Phil	Ph.D.

   b. **Training :**

C.T.	NTT	B.Ed...L.T.

7. Teaching Experience at Primary Middle Stage :

   As a Teacher

Year	Month

   As a Head Master

Year	Month

8. If attended any In-service training Programme.

    (a) In D.I.E.T.

Yes	No

    (b) In any other ogranisation

9. If yes, the in-service training was

    concerned with

Teacher	Head Master

10. Write down the name(s) of the in-service training attended so far :

0	1	2	3	4

Name of the Teacher _____   Date of

observation_____

School Address _____   Class _____

Period_____

Student enrolled in class_____

Student Attendence_____

Classroom Observation Scale

Sl.No.	Area wise Competencies	Rating Sclae				
		6	4	3	2	1
1.	**Preparation of Instruction**					
	Plan lesson					
	Identify student learning needs					
	Summarize the lesson					
	Assigning home work					
2.	**Development, Preparation and Utilization of In-structional Materials**					
	Prepare teaching aids					
	Utilize text book and manual					
	Utilize black board					
	Utilize teaching aids					
	Demonstrate experiment					
	Utilize community resource					
	Develop learning activities					
	Operate hard ware					
	Analysis text book					

Sl.No.	Area wise Competencies	Rating Sclae				
		6	4	3	2	1
3.	**Motivation of children**					
	Motivation the student					
	Establish rapport with primary student					
	Manage class room dicipline					
	Conduct cultural activities					
	Motivate student of higher age-group					
4.	**Communication in class room**					
	Utilize the techniques of teaching					
	Provide effectived feed back					
	Conduct dramatisation					
	Recite a poem					
	Narrate a story					
	Conduct role play					
	Undertake multigrade teaching					
5.	**Methods of Instruction**					
	Provide experience based teaching					
	Conduct oral drill exercise					
	Adopt play way method					
	Adopt attainment approach					
	Adopt project method					
	Adopt guided discovery method					
	Adopt inductive deductive method					
	Adopt problem solving method					
	Adopt method to develop creativity					
	Adopt self instructional techniques					
	Adopt group discussion method					
	Implement new education ideas					
	Organize competency based teachng					
	Device and adopt innovative ideas in teaching					

Sl.No.	Area wise Competencies	Rating Sclae				
		6	4	3	2	1
6.	**Evaluation of Learning**					
	Construct appropriate evalution tools					
	Conduct continious and comprehensive education					
	Assess student performance					
	Organise remedial instruction					
	Diagnose student learning difficulties					
7.	**Diagnose And Remediation**					
	Conduct follow up activities					
	Organise and conduct guidance activities					
8.	**Class-Room Management**					
	Manage the learning environment					
9.	**Co-Curricular Activities**					
	Arrange out door activities					
	Conduct sports and game					
	Utilise the community resource					
10.	**Community Participation**					
	Establish rapport with parents					
	Participate of social activities					
11.	**Sepcial Education**					
	Provide educational assistance for children					
	Cater to mix ability groups					
12.	**Institutional planning**					
	Develop instructional planning					
	Maintain records					
	Work in a team college					
	Establish rapport with staff					
	Undertake self evaluation					
	Conduct action research					
	Assist in conducting survey					

Class Room Observation Scale

A	B	C	D	E	F	G	H	I	J
1.	Utilise the community resource								
2.	Summaries the lesson								
3.	Assign homework								
4.	Adopt 'play way' method								
5.	Adopt 'concept attainment approach'								
6.	Adopt 'project method'								
7.	Adopt 'guided discovery method'								
8.	Adopt 'inductive deductive method'								
9.	Adopt 'problem solving method'								
10.	Adopt 'method to develop creativity'								
11.	Adopt 'self Instrucional technique'								
12.	Adopt 'group discussion method'								
13.	Construct appropriate evaluation tools								
14.	Conduct continuous and comprehensive evaluatin								
15.	Assess student performance								

A	B	C	D	E	F	G	H	I	J	K
16.	Provide effective feedback									
17.	Diagnose student learning difficulties.									
18.	Organise remedial instruction									
19.	Provide educational assistance for children with special needs									
20.	Undertaking multigrade teaching									
21.	Conduct and involve students in cultural activities like morning prayer, national cultural events									
22.	Arrange outdoor activities (Visit/Trips)									
23.	Conduct sports and games									
24.	Organise and conduct guidance activities									
25.	Conduct follow-up acitivies									
26.	Develop institute plans									
27.	Assist in maintaining records									
28.	Work in team of colleagues									
29.	Establish rapport with the staff									

A	B	C	D	E	F	G	H	I	J	K
30.	Undertake self evaluation									
31.	Condut action research									
32.	Implement new educational ideas									
33.	Analysis a text book									
34.	Establish rapport with parents communuty through informal way									
35.	Assist in conducting survey									
36.	Participate in social service activities									
37.	Organise competency based teaching									
38.	Develop learning activities on competency in each subject									
39.	Device and Adopt innovative ideas in teaching									
40.	Cater to mixed ability groups									

Any other competency based training needs perceived by you :

PRE-INDEPENDENCE EXEMPLAR OF INNOVATINS IN EDUCATION

1. Gijubhai Badheka Pre-primary Education Programme Daxinamurti, Bhavnagar, Gujarat - 1920 Shri Gijubhai Bhadheka (1885-1939) evolved system of education where in freedom and love for children were core ingredients. 1-le brought the child in the centre of education. He gave the child prime position vis-a-vis the other components - the teacher and the subject. He raised his voice for the freedom of the child and cried out against the use of fear and corporal punishment in schools about eighty five years ago. He started pre-school called Balmandir in 1920 where in he introduced an environment for learning that is friendly and full of love. It was a major break through from the conventional environment.

The very essence of his process of educating the child is to help him to become independent, to have self control and become self radiant. Gijubhai gave full respect to the child, his/her thought and also his/her feelings. It completed stories, music, play an educational tewls. Children with full attention and interest, learnt the lessons. He go **full** freedom to cach child to do, whatever hc she like to draw. IB establishing 13 Bal Mandir and carrying lots of experiments hc worked knowledged and methodology tools , literature and what not.

His book road map for recolutimalising elementary education. Where in, how a teacher can revolutionallise the method of school subjects like Language, history , Geography , Science etc. and also

"teach" cleanliness, manners, learn in group, play for not competition but for Joy, to read, to do activities without noise and in order.

He was inspired by 'Madam Montissori's wurk. He adopted her thoughts and methods rendering them suitable to Indian culture. lle made a departure from her view about story telling and wrote about books, of stories for children.

2. Rabindranath Tagore Established Shantiniketan, West Bengal - 1921

Ravindra Nath Tagore (1861-1941) was a genious and his contribution various not only confined to arts but overflowed in channels of nation - building activities. He considered education is most important tool for nation development. He devoted the best part of this life in conducting valuable educational experiments at Shantiniketan). He weathered all sorts of material hardship and made all kinds of personal sacrifice to enable Shantiniketan full contribution in reconstruction of India.

He was highly dissatisfied with current Western Education which he considered education with feable curriculum (of USA or UK) and examination oriented bookish education encouraging rote learning and copying from the books.

He regarded freedom and play were basic to all learning.

For him the place of mother tongue in education is like mother's breast milk and so medium of instruction should be mother tongue upto higher level. Because he believed that for the purpose of

insruction and self-expression the mother tongue has advantages which no other language can have.

Method of teaching was not to use compulsion and there was a minimum of curriculum in the institute.

co-education was introduced in those days at Shantiniketan. It was a radical step in those days. Art had a definite place in Shantiniketan.

His educational ideas were basically meolided by his philosophic ideas particularly of *Upnishad*. The whole universe is a manifestation of one all powerful being, which pervades all time and space. That is why he saw unity in diversity.

He also believed that there is a divine spark in each and every thinng, which lead Rabindranath Tagore to love every creature and every creation of God. The kernel of his educatinal concept is the spiritual union between man and nature. He envisaged that children should be allowed to grow in an atmosphere of freedom in the lap of uncorrupted nature.

Mahatma Gandhi Launched Scheme of Basic Education for Primary Stage- Wardha, Maharashtra-1937

Mahatma Gandhi envisaged a classless, peaceful and exploitation less society. A society full of love, non violence, truth and justice. Only in such society one can completely develop his/her potential and spiritual development.

To him education means drawing out of the best in child's body, mind and spirit. He belived sounc education should produce useful citizen-whole man and women with harmonious development of all the four aspect of human life-hand, head, heart and spirit. He had full faith in eduction through which such society can be created.

He firmly believed that western education (of his time) not related to indigenous culture of India, not only that western education is not related to life and believed that western eductiion is not only wasteful but harmful.

He was convinced that social, moral, political and economic regneration of India is dependent on right type of education. It is only education, which can help in achieving peaceful, non-violant, society which is also based on truth and justice.

The chief tents of his educational philosophy were :

1.   Education will be craft contered.

2.   It should be self supporting.

3.   The medium of instruction will be mother tongue.

4.   Education should be free and compulsory (primary education) up to the age of fourteen years of every child.

His plea for craft centred education was widely criticised. He strongly hold that the work will train the body, will simulate intellect, train the mind, will make children self reliant and independent. It will generate dignity of labour in the minds of children and will decrease discrimination between working poor and non working people. Thus

his scheme of education round work aim at silent social revolution with far reaching consequences.

The instrumentatiion given through mother tongue will be children's environment and will inbibe, Indian culture easily. English should be taught only when the child is proficient in mother tongue, i.e., at the age of fourteen.

In the curriculum for the seven years (7 to 14 years to age group) he advocated inclusion of educational subjects like.

1. Mother tongue

2. Basic Craft

3. Mathematics

4. Sciences- Nature Study, Botany, Zoology, Physiology, Hygiene, Physical Culture, Chemistry, Some relvant knowledge about stars.

5. Social Studies- History, Geography and Civics.

6. Study of Hindi

He also gave details of training of teachers where in

1. One Basic Craft

2. Principles of Education .

3. Mathematics.

4. An out line course in Physiology, Hygiene, Sanitation etc.

5. Social Studies- A course in History, Geography and Civics.

6. To orient would be teachers to general, cultural background through master pieces of literature in mother tongue.

7. Hindi

8. Proper orientation to be given to the many fold problems of his social environment.

9. Physical, culture, drill, deshi games, supervised practice, teaching.

The vision of Mahatma Gandhi was accomplished by Dr. Zakir Hussain at Jamia Millia Islamia.

REFERENCES

BOOKS :

Aggarawal, J.C. : Progress of Education in Free India, New Delhi : Arya Book Depot, 1973.

Aggarawal, J.C. and Aggarawal, S.A. : Role of UNESCO in Education, New Delhi : Vikas, 1982

Aggarawal, J.C. : Teacher and Education in Developing Socieyt, New Delhi : Vikas, 1995.

Bhatnagar, S: Education and Communication Technology, Punjab University: DCC Publicatiion, 1988.

Buch, M.B. (Ed.) : Survey of Research in Education, CASE, M.S. University Baroda, 1972

Buch, M.B. (E.D.) : Fourth Survey of Resarch in Education NCERT. New Delhi, 1992.

Cantant, J.B. : The Education of American Teachers, New York : McGraw Hill, 1963.

Daniel, Bell : The coming of Post Industrial Society : A Venture of Social Forecasting, London, Heinenemann Educational Pvt. Ltd., 1974,.

Gupta Arun, K. : Techer Education : Current and Prospectus, New Delhi, Sterling, 1984.

Khan, M.S. : Education Research, New Delhi, Ashish, 1990.

Kochar, S.K. : Pivotal issues in Indian Education, New Delhi : Sterling, 1980.

Kundu, C.L. Indian Year Book on Teacher Education, New Delhi, Sterling, 1988.

Kuppuswamy, B. : Social Change in India, New Delhi : Vikas 1972.

Mukherjee, S.N. : History of Education in India, Vadodara, Acharaya, 1974.

Narayan Karan Reddy, V: Problems of Futurology, New Delhi, Sterling, 1991.

Passi, B.K. and Sahoo, P.K. : Futures Studies : Agra; National Psychological Corporation, 1991.

Rawat, R.L. : History of Indian Education, Agra : Ramprasad, 1989.

Robert, L.E. : Encyclopedia of Educational Research, Fourth Edition, London 1976.

Safaya, Raghunath : Current Problems of Indian Educationb , Jullunder, Pratigya, 1977.

Sharma, R.A. Teacher Education, Meerat : Internatinal Publishing, 1992.

Tofler Alvin : Future Shock, Great Britain : The Badly Head, 1970.

PERIODICALAS

Arrora, Asha : Distance Education, University News. XXXII, No. 21 1994.

Dhupkar Gitika Datta : Futurology Education Development Skill for Future Thinking, University News, December, 25, 1995.

Goel, D.R., Jaiswal, Kiran, Educational Media in India, University News, November 16, 1992.

Lalit Kishor : Emphassing Reflective In-service training, Progressive Educational Herald, Jan., 1994.

Sahool. P.K. : Development of Higher Education in India Prsent and Future, Journal of Educational Planning and Administration, Vol. 4, No.-2, April 1920.

Satyanaryana, P. : Teacher Education at a Distance : The Emerging Scenario, Progressive Educational Herald, Vol. 7, No.-1 October, 1992.

Sethumadhava Rao, P.H. : Interdisciplinary Studies and Higher Education, University News, April, 1992.

PUBLICATIONS OF THE GOVERNMENT :

Government of India : Education Commission Report 1964-66, Ministry of Education, 1967.

Government of India : National Commission on Teachers- 1983. A policy perspective in Teacher Education, NCERT, 1995.

Government of India : Challenge of Education, A policy perspective 1985, New Delhi, Ministry of Education, 1985.

Government of India : Programme of Action 1992, Action plan for Teacher Education Policy perspectives in Teacher Education, NCTE, 1995.

NCTE : Policy Perspective in Teacher Education : New Delhi, 1990.

NCERT : Report of the working Group on In-service Education of Teachers, New Delhi, 1986

SCRET (A.P.) : Evaluation of In-service training programme for Primary Teachers in Selected government and Aided Teachers Training Institutes, Project Report, 1981.

UNESCO PUBLICATION :

Evaluation in Asia and Pecific Retrospect, Prospect, Bangkok, 1986,.

School Based In-service Training A Hand Book, UNESCO Regional office for Education in Asia and The Pacific, Bangkok, 1986.

Teacher Education : Distance of Change, Report of High level Teacher Education Project Study and Seminar, Bangkok, 1979.

Teacher Education Issues, Needs and Plants for Action, Asia, and Pacific, Bakgkok, 1987.

NCERT PUBLICATIONS :

2.1   National Curriculum Framework 2005 of Position paper National Focus Group on Aims of Education

2.2   National Curriculum Framework 2005 Position Paper National Focus Group on Systemic Reforms for Curriculum Change.

2.3   National Curriculum Framework 2005 Position Paper National Focus Group on Curriculum, Syllabus and Text Books

2.4   National Curriculum Framework 2005 Position Paper National Focus Group on Teacher Education for Curriculum Renewal

Journal of Indian Education Volume XXXII, Nuber-2, August 2006. National Council of Educational Research And Training.

THESIS/DISSSERTATION/OTHERS :

Abrol, P.C. : Constraints in the educability of the Tribes-Gaddies, Gujaras and Backward in Jamu region Ph.d. Unpublished Thesis, Punjab University, Jalandhar, 1988.

Ambasht, N.K. & Rath, R.B. : Effect of house hold, community and school factors on the enrolment, retention and achievement of scheduled tribe children at primry level, in school effectiveness and learning achievement at primary stage : International Perspective, NCERT, 1995.

Banerjee, J.C. : Training of Primary Teachers in India" Ph.D. Thesis Edu., M.S. University Borada : A Survey of Research in Education, 1974. M.B. Buch (ed.), M.S. University, Baroda, Centre of Advance study in Education.

Biskerstaff, Jemes, Paul : An Analysis of multicultural In-service Teachers Training in Bouquet Country, Pennsylvania University of Pittsburgh, 1993.

Bhat, V.D. Identification of essential Competencies for Primary Teachers, NCERT, 1998.

Das, A. : Innovative education in remote tribal blocks : A search for contents and methods, Independent study, Koraput Agragamee, Kashipur, 1991.

Gaur, A.K. The Study of Special facilties (incentive) and eudcational development of tribal students and attitude of society towards them, Independent Study, Uda ypur : Government KPSHSS, 1989

Kapoor B.K. Development and Validation of In-service training curriculum for primary school Head Masters of Delhi, Unpublished Ph.D. Education Thesis, Kota Open University, Kota, 2001.

Keyser, Bette Benewich : A Systematic Desion for In-service Education of Secondary School Health Teachers in IIIinois, IIIinos State Unversity EDD, 1994.

Khan, M. : Background of In-service primary teacher training and thei perceptiion of in-service training through distance education node BTI level M.P., M.Ed,. Dissertation, Devi Ahilya Vishwa Vidyala, Indone. 1986,.

Kim, Chul Jod. Instructional technology in Korean secondary schools, University of Georgia, 1992.

Mama, K. : A Study olf Impact on In-service Eduction on Teachers in the State of Maharashtra, Unpublished, Ph.D. Education Thesis University Of Bombay, 1986.

Msavi, M. : Wastage of Stagnation in primary education in tribal areas, Tribal Research and Training Institute, Gujrat Vidyapith, Ahamadabad, 1976.

Panda, B.K. : A Socilogical study of the functiion, organisation and impact of tribal schools int he Koraput tribal district of Orrissa, Ph.d. unpublished thesis, jamioa Millia Islamia University, 1992.

Pugaenthi, G,. : Teachger Education Programme Though Correspondenc System in M.K. University, Unpuhlished Ph.D Education Thesis, M.S. University, Baroda, 1992.

BOX NO. 1

Elementary Teacher Education: An Integral Approach

Mirambika, Sri Aurobindo Educational Society, New Delhi (1983)

Integral education is 'education for the whole human being,' in which learning through experience, as a wide, high and a deep process is the basis for development of the potential of each student.

Content: The programme aims, through a process of increasing self-awareness, the maximum development of capacities and qualities of the physical, affective and cognitive domains and self-discovery of deeper and subtler layers of one's soul and spirit. Education is seen as a process of becoming, yet it is the respect for the uniqueness of learner that will allow him/her to find his/her own progressive balance in the development of outer life and innermost being.

Student–teachers: Processes *include self-directed learning and self-observation leading the learner to conscious choices regarding study material: self-reflection and self-evaluation.*

Teacher–educators: Processes to ensure self-motivated learning each one of the student-teachers is encouraged to discover personal strengths and weaknesses, a teacher needs to go through a change in attitude related to her/his own professional functioning. *What is required is a shift from being a task master to helper, from instructing to evoking.*

Some of self-directed learning strategies are: *find answers to deep reflective questions; find ways to apply these in daily life; reflective reading; reflection on observations in the classroom followed by group discussion. This can be followed by personal reflection and identification of issues for further self-study; presentations that demonstrate assimilation and application; keeping a diary with the aim to look within, identify weaknesses and strengths and work on perfecting these.*

Evaluation: Integral education aims at an assessment that avoids judgment but *gives positive feedback, is diagnostic and helps students to understand what has to be strengthened and identify the next goals in the learning process.*

Experience has shown that when students are given true respect they are remarkably honest about their capacities and limitations. Moreover, self-evaluation is one of the best tools for fostering self-awareness, which is so essential for becoming a good educator.

When a student-teacher learns to take ownership for self development, to find answers and ways that will increase her strengths, deepen her potential qualities and overcome weaknesses; when she has experienced this process everyday she will naturally evoke a similar process in the children in the class and will be able to create a truly child centered learning environment. If true learning could become the guiding principle in the education process, a decisive shift could take place that would make students, educators and the nation blossom.

BOX NO. 2

Four year Integrated Programme of Elementary Teacher Education

The B.El.Ed., Maulana Azad Centre for Elementary and Social Education (MACESE), Faculty of Education, University of Delhi (1994)

The Bachelor of Elementary Education (B.El.Ed.) is a four year integrated professional degree programme of Elementary Teacher Education offered after the senior secondary (Class XII or equivalent) stage of school. It is currently offered in six colleges of the University of Delhi. Over seven hundred students have graduated from this programme and are widely sought in both government and private school systems. Some of them are now teacher educators after completing post graduation in liberal arts, humanities and social sciences.

The (B.El.Ed.) programme is designed to integrate the study of subject knowledge, human development, pedagogic knowledge and self-knowledge. The main aim of the B.El.Ed. is to prepare reflective practitioners who are socially sensitive. It is an attempt to replace an unquestioning and meek teacher with one who can critically reflect on the 'received' curriculum and 'prescribed' knowledge. It prepares students to move beyond mere textbook knowledge. The B.El.Ed. students attempt to initiate their own inquiry, examine ideas in all their complexity and deal with ambiguity. The aim is to develop in students a mental flexibility needed to critically examine and synthesise knowledge from various sources and deal with the complex challenges of classroom teaching. The students learn to engage with issues of subject content, reflect on appropriate methods of assessment and attempt to evolve pedagogy in consonance with the needs of the learner.

The B.El.Ed. course attempts to develop the individuality of the student based on the assumption that it is the individual transformation that leads to social transformation. The course structure gives students the space to engage intensely with issues of understanding themselves and others. There is a special emphasis on understanding the nature of the child, the adult-child relationship and its dynamics within the classroom. The students engage with issues of politics of education within the classroom as they reflect on the best way of facilitating children's learning. This course is also designed to develop an understanding of contemporary Indian realities through a study of key historical, political, social cultural and economic issues. Students observe and analyse gender inequities in the process of schooling and develop intervention strategies. The B.El.Ed. curriculum is cyclic in nature whereby the same issues are dealt with at different levels of complexity and within different contexts over the four years.

The longer duration of the programme offers students critical psychological space to explore and define their own approaches to educational issues as they are in regular contact with the school setting over the four years. There is a sustained 17 weeks school internship programme in the fourth year where students attempt to translate their thoughts into action and critically reflect on this process. Students also visit institutions engaged in innovative practice in elementary education, in order to broaden their horizons. Students undertake research projects with an aim to further develop the process of reflective enquiry through classroom-based research. Through specially designed colloquia students learn specific professional skills like using theatre, art, crafts, story telling and music in education and creating a resource centre in schools.

BOX NO. 3

The 'Anweshana Experience': A Participative Teacher Education programme:
B.Ed. (Enriched), Department of Education, Banasthali Vidyapith, Rajasthan (1997)

A Teacher Education Programme (TEP) is different from any other 'academic' programme. The concerns, expectations as well as pressures placed on it as a professional education programme are far dense in comparison to those related to academic programmes. In operation, however, any TEP is very similar to an academic programme in that its curriculum is framed based on a set of assumptions, replete with several instructional experiences, each well chosen, and justified. Within such a structure, students remain merely recipients of knowledge given by teacher educators. The actual quality depends upon the quality of the 'providers' as well as that of the 'receivers'. Experience has it that the school system is but little impacted by such TEPs. It is with such a line of argument that an attempt was made at the Faculty of Education, Banasthali Vidyapith, during the year 1997-98 to create a differently designed TEP. The main aim was to explore the possibility of evolving such a flexible programme within the available resource time frame and of finding out the extent to which the experience becomes 'participative'.

Assumptions

The Anweshana experience believes that there is need for and possibility of providing opportunities during TEP to all student teachers to truly *participate and learn* in one's own way. They should participate not as mere 'recipients' but as learners to evolve *curriculum and its transaction* modes. The nature and number of learning experiences could emerge according to learner needs. Such a programme would be *meaningful and enriched* for each student teacher individually. Each would find her own potential and be capable of using it effectively. Organisationally, such an integrative, experiential approach would induce into the TEP with greater rigour, avoid redundancy in substantive inputting, enhance assimilation and optimise resource utilisation without overstretching resource-time frame.

The Programme which has been named by the students as **"Anweshana"** and approved by the NCTE as B.Ed. (enriched), essentially comprises the following:

- *Initiation* involves making decisions as to how to go about independently; gaming, ice breaking; *Sensitisation* comprises several inputs which lead to perceiving ones' own strengths and weaknesses, acceptance of others, significance of teacher roles and their demands and field conditions. Such sessions are more frequent in initial phase.

- All other learning experiences comprise the *substantive inputting*. These pertain to the kinds of things – conceptual as well as practical, that student teachers identify as relevant for them to become effective teachers. The modes of interaction are also as perceived as relevant – both collectively and sometimes individually. The teacher educators are there to support, supplement, participate in the group processes and facilitate group's functioning.

- *Appraisal and feedback* comprise several kinds of appraisal acts in the form of self appraisal, peer appraisal, teacher feedback and also formal testing, as and when felt necessary. The university examination is held at the end of the year.

Points of Departure

Evolving curriculum; learner centered; participative; high relevance perception; individual and group decided pace and learning routes; continuous appraisal and feedback; personally satisfying to students; enhanced self-development.

BOX NO. 4

Comprehensive Teacher Education Programme: Gandhi Shikshan Bhawan, College of Education Mumbai University, Mumbai (2000)

Gandhi Shikshan Bhawan, an affiliated College of Education of Bombay University offers an integrated B.Ed. degree programme for secondary school teachers since 2000. It provides first hand experiences of a slum community. The aim is to make student teachers aware of the socio-economic, cultural traditions of the poor and backward and its impact on the education and development of children. Teachers are educated to develop the conviction and the professional skills to help children come out of such adverse conditions. Such an approach has now become a part of the B.Ed. degree programmes of all the Colleges of Education of Bombay University.

On the same line department of education of Jamia Millia has proposed to incorporate the social context elements into teachers training programme.

All these innovations compels one to be convinced that drastic and revolutionary changes are possible and the Gandhi Shikshan Bhavan of Bombay and proposed programme of Department of Education of Jamia Millia shows the readiness to change the Teacher Education programme. But only the fully participative process oriented programme should be adapted and that is the need of the day. That can only change education scenario of Indian education.

TABLE-1
FUTURE TRAINING NEEDS AS PERCEIVED BY TEACHERS AND EXPERTS

Competency	Trained and Untrained Teachers Perception Commonly	Untrained Teachers Distinct Perception	Experts Perception on Trained and Untrained Teachers
I. Preparation for instruction			
Plan lesson		✓	✓
Identify student learning needs and interest of primary students.		✓	✓
Summerise the lesson	✓		
Assign home work.			
II. Develop Preparation and Utilisation of instructional Materials.			
Preparation teaching aids		✓	✓
Utilise text books and manual		✓	✓
Utilise black board		✓	✓
Utilise teaching aids		✓	✓
Demonstrate experiment	✓		✓
Utilise community resources	✓		✓
Develop learning activities on competency in each subject	✓		✓
Operating hard ware	✓		
Analyse text book		✓	
III. Motivation of Children			
Motivate the student		✓	✓
Establish rapport with primary student through informal communication	✓		
Manage the classroom discipline	✓		
Maintain learning environment			
Conduct and involve student in cultural activities.		✓	✓
Motivate the students especially higher age group.	✓		✓

Competency	Trained and Untrained Teachers Perception Commonly	Untrained Teachers Distinct Perception	Experts Perception on Trained and Untrained Teachers
IV. Communication in Classroom			
Utilise the techniques of questioning		✓	✓
Provide effective feedback		✓	✓
Conduct dramatization		✓	✓
Recite a poem			
Narrate a story	✓		
Conduct role play	✓		✓
Undertake multi grade teaching		✓	✓
V. Methods of Instruction			
Provide experienced based teaching	✓		
Conduct oral drill exercise	✓		
Adopt play way method	✓		✓
Adopt concern attainement approach	✓		✓
Adopt project method		✓	✓
Adopt guided discovery method		✓	✓
Adopt inductive deductive method		✓	✓
Problem solving method		✓	✓
Problem solving method		✓	✓
Methods of develop creativity		✓	✓
Self instructional techniques		✓	✓
Group discussion method		✓	✓
Implement new education ideas		✓	✓
Organise competency based teaching		✓	✓
Device & adopt innovative ideas in teaching		✓	✓
VI. Evaluation of Learning			
Construct appropriate evaluation tools		✓	✓
Conduct continues and comprehensive evaluation		✓	✓
Assess student performance		✓	✓
Organise remedial instruction		✓	✓
Dignosis student learning difficulties		✓	✓
VII. Dignosis and Remediation			
Conduct follow up activities		✓	✓
Organise & conduct guidance activities		✓	✓

Competency	Trained and Untrained Teachers Perception Commonly	Untrained Teachers Distinct Perception	Experts Perception on Trained and Untrained Teachers
VII. Classroom Management			
Manage the learning environment	✓		✓
IX. Co-Curricular Activities			
Arrange our door activities		✓	✓
Conduct sports and game		✓	
Utilise community resources specially in case of non-availability of essential aids from Government.		✓	✓
X. Community Participation			
Establish rapport with parents.		✓	✓
Participation of social service activities.		✓	✓
XI. Special Education			
Provide educational assistance for children with special needs.		✓	✓
Cater to mixed ability groups			
XII. Institutional Planning			
Develop institutional planning		✓	
Maintaining records		✓	✓
Work in a team of colleague		✓	
Establish rapport with staff		✓	✓
Undertake self evaluation		✓	✓
Conduct action research		✓	✓
Assist in conducting survey		✓	

TABLE-2
PRESENT TRAINING NEEDS AS
PERCEIVED BY TEACHERS AND EXPERTS

Competency	Trained and Untrained Teachers Perception Commonly	Untrained Teachers Distinct Perception	Experts Perception on Trained and Untrained Teachers
I. Preparation for instruction			
Plan lesson		✓	✓
Identify student learning needs and interest of primary students.		✓	✓
Summerise the lesson	✓		
Assign home work.		✓	
II. Develop Preparation and Utilisation of instructional Materials.			
Preparation teaching aids		✓	✓
Utilise text books and manual		✓	✓
Utilise black board		✓	✓
Utilise teaching aids		✓	✓
Demonstrate experiment	✓		✓
Utilise community resources	✓		✓
Develop learning activities on competency in each subject	✓		✓
Operating hard ware	✓		
Analyse text book		✓	✓
III. Motivation of Children			
Motivate the student		✓	✓
Establish rapport with primry student through informal communication		✓	
Manage the classroom discipline	✓		
Maintain learning environment		✓	
Conduct and involve student in cultural activities.		✓	✓
Motivate the students especially higher age group.		✓	

Competency	Trained and Untrained Teachers Perception Commonly	Untrained Teachers Distinct Perception	Experts Perception on Trained and Untrained Teachers
IV. Communication in Classroom			
Utilise the techniques of questioning		✓	✓
Provide effective feedback		✓	✓
Conduct dramatization		✓	✓
Recite a poem	✓		
Narrate a story		✓	
Conduct role play		✓	
Undertake multi grade teaching		✓	✓
V. Methods of Instruction			
Provide experienced based teaching			
Conduct oral drill exercise		✓	
Adopt play way method		✓	✓
Adopt concern attainement approach			✓
Adopt project method		✓	✓
Adopt guided discovery method		✓	✓
Adopt inductive deductive method		✓	✓
Problem solving method		✓	✓
Problem solving method		✓	✓
Methods of develop creativity		✓	✓
Self instructional techniques		✓	✓
Group discussion method		✓	✓
Implement new education ideas		✓	✓
Organise competency based teaching		✓	✓
Device & adopt innovative ideas in teaching		✓	✓
VI. Evaluation of Learning			
Construct appropriate evaluation tools		✓	✓
Conduct continues and comprehensive evaluation		✓	✓
Assess student performance		✓	✓
Organise remedial instruction		✓	✓
Dignosis student learning difficulties		✓	✓
VII. Dignosis and Remediation			
Conduct follow up activities		✓	✓
Organise & conduct guidance activities		✓	✓

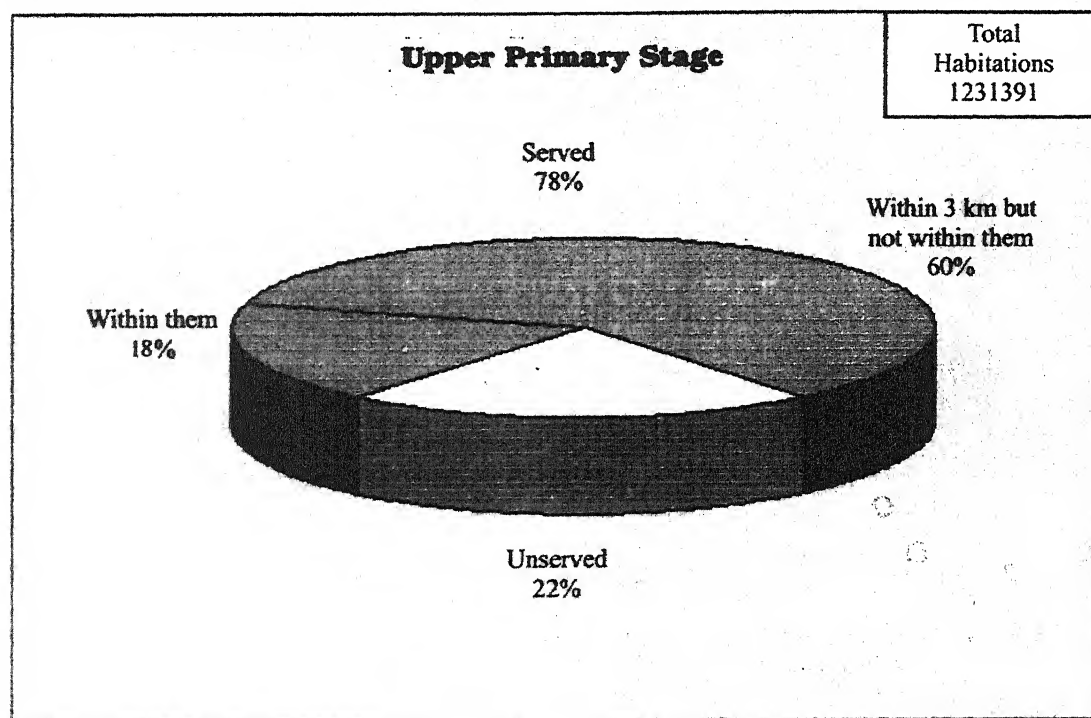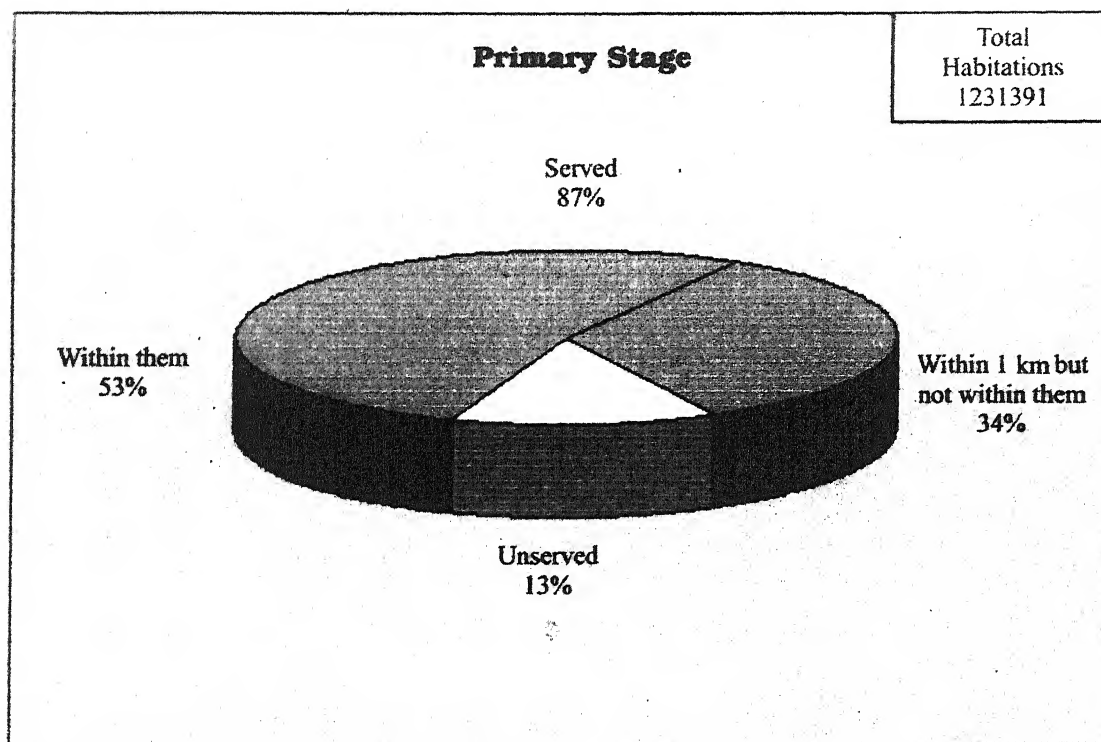| Competency	Trained and Untrained Teachers Perception Commonly	Untrained Teachers Distinct Perception	Experts Perception on Trained and Untrained Teachers
VIII. Classroom Management			
Manage the learning environment		✓	✓
IX. Co-Curricular Activities			
Arrange our door activities		✓	
Conduct sports and game		✓	
Utilise community resources specially in case of non-availability of essential aids from Government.		✓	✓
X. Community Participation			
Establish rapport with parents.		✓	✓
Participation of social service activities.		✓	✓
XI. Special Education			
Provide educational assistance for children with special needs.		✓	✓
Cater to mixed ability groups		✓	✓
XII. Institutional Planning			
Develop institutional planning		✓	
Maintaining records		✓	✓
Work in a team of colleague		✓	
Establish rapport with staff		✓	✓
Undertake self evaluation	✓		✓
Conduct action research		✓	✓
Assist in conducting survey		✓	

TABLE-3
COMPETENCIES LACKING AMONG TEACHERS AS PERCEIVED BY TEACHERS AND EXPERTS AS WELL AS RESEARCHER

Competency	Trained and Untrained Teachers Perception Commonly	Untrained Teachers Distinct Perception	Experts Perception on Trainined & Untrained Teachers	Researchers Observation
I. Preparation for instruction				
Plan lesson		✓		
Identify student learning needs and interest of primary students.			✓	
Summerise the lesson			✓	
Assign home work.				
II. Develop Preparation and Utilisation of instructional Materials.				
Preparation teaching aids		✓		
Utilise text books and manual				
Utilise black board				
Utilise teaching aids		✓		✓
Demonstrate experiment				
Utilise community resources				
Develop learning activities on competency in each subject				
Operating hard ware				
Analyse text book			✓	
III. Motivation of Children		✓		
Motivate the student				
Establish rapport with primary student through informal communication		✓	✓	
Manage the classroom discipline			✓	
Maintain learning environment				
Conduct and involve student in cultural activities.			✓	
Motivate the students especially higher age group.		✓	✓	

| Competency	Trained and Untrained Teachers Perception Commonly	Untrained Teachers Distinct Perception	Experts Perception on Trainined & Untrained Teachers	Researchers Observation
IV. Communication in Classroom				
Utilise the techniques of questioning				✓
Provide effective feedback	.	✓		
Conduct dramatization		✓	✓	
Recite a poem			✓	
Narrate a story			✓	
Conduct role play		✓		
Undertake multi grade teaching		✓		
V. Methods of Instruction				
Provide experienced based teaching		✓		
Conduct oral drill exercise			✓	
Adopt play way method				
Adopt concern attainement approach		✓		
Adopt project method		✓	✓	✓
Adopt guided discovery method		✓		✓
Adopt inductive deductive method				✓
Problem solving method				
Methods of develop creativity				
Self instructional techniques				
Group discussion method				
Implement new education ideas	✓		✓	✓
Organise competency based teaching	✓		✓	✓
Device & adopt innovative ideas in teaching	✓			✓
VI. Evaluation of Learning				
Construct appropriate evaluation tools		✓	✓	✓
Conduct continues and comprehensive evaluation		✓	✓	✓
Assess student performance				
Organise remedial instruction	✓			
Dignosis student learning difficulties		✓	✓	✓
VII. Dignosis and Remediation		✓		✓
Conduct follow up activities	.			
Organise & conduct guidance activities	✓			

Competency	Trained and Untrained Teachers Perception Commonly	Untrained Teachers Distinct Perception	Experts Perception on Trainined & Untrained Teachers	Researchers Observation
IV. Communication in Classroom				
VIII. Classroom Management				
Manage the learning environment				
IX. Co-Curricular Activities				
Arrange outdoor activities				
Conduct sports and game				
Utilise community resources specially in case of non-availability of essential aids from Government.	✓			
X. Community Participation				
Establish rapport with parents.		✓		
Participation of social service activities.			✓	
XI. Special Education				
Provide educational assistance for children with special needs.				
Cater to mixed ability groups	✓		✓	
XII. Institutional Planning				
Develop institutional planning	✓		✓	✓
Maintaining records	✓			
Work in a team of colleague				
Establish rapport with staff			✓	
Undertake self evaluation				✓
Conduct action research	✓			
Assist in conducting survey			✓	

Figure 1
Educational Facilities in Rural Habitations in India, 2002

Primary Stage

Total Habitations 1231391

Served
87%

Within them
53%

Within 1 km but
not within them
34%

Unserved
13%

Upper Primary Stage

Total Habitations 1231391

Served
78%

Within 3 km but
not within them
60%

Within them
18%

Unserved
22%

Note: Rural habitations with primary/upper primary stage schooling facility within one/three km are being considered served otherwise unserved.

Figure 2
Growth in Rural Habitations having Educational Facility
(1993 to 2002)
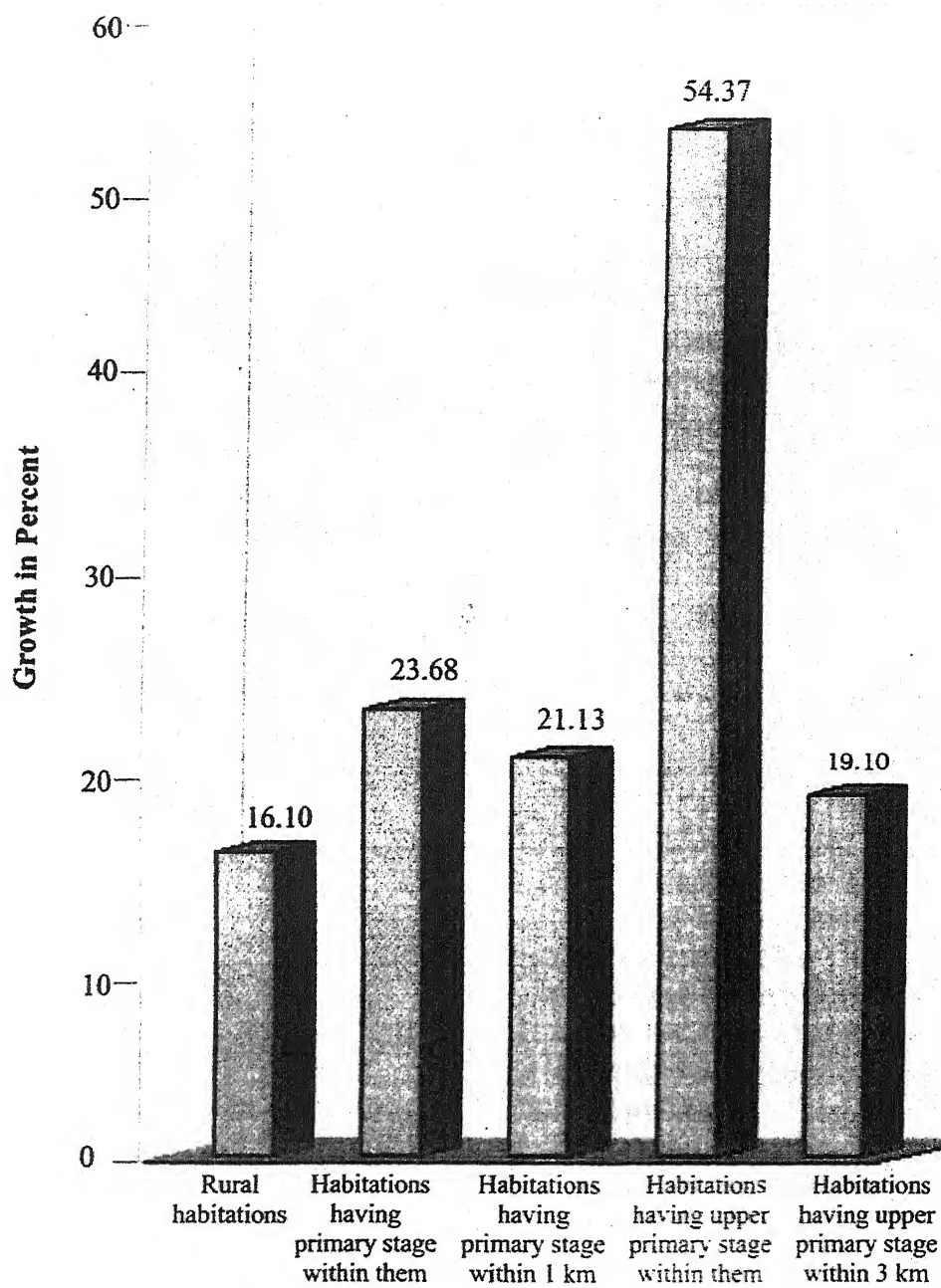
Figure 3
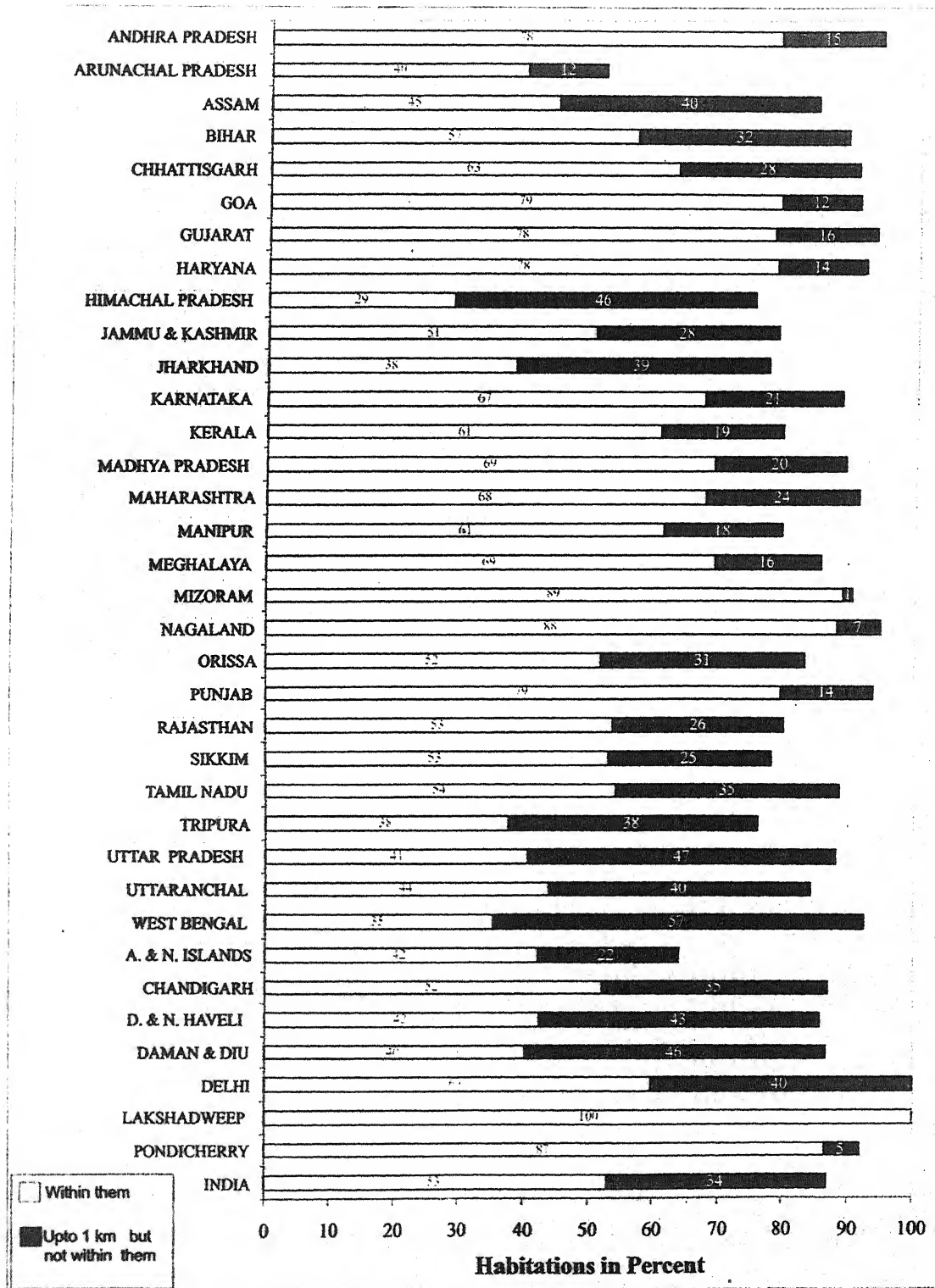## State-wise Rural Habitations having Primary Stage Schooling Facility, 2002

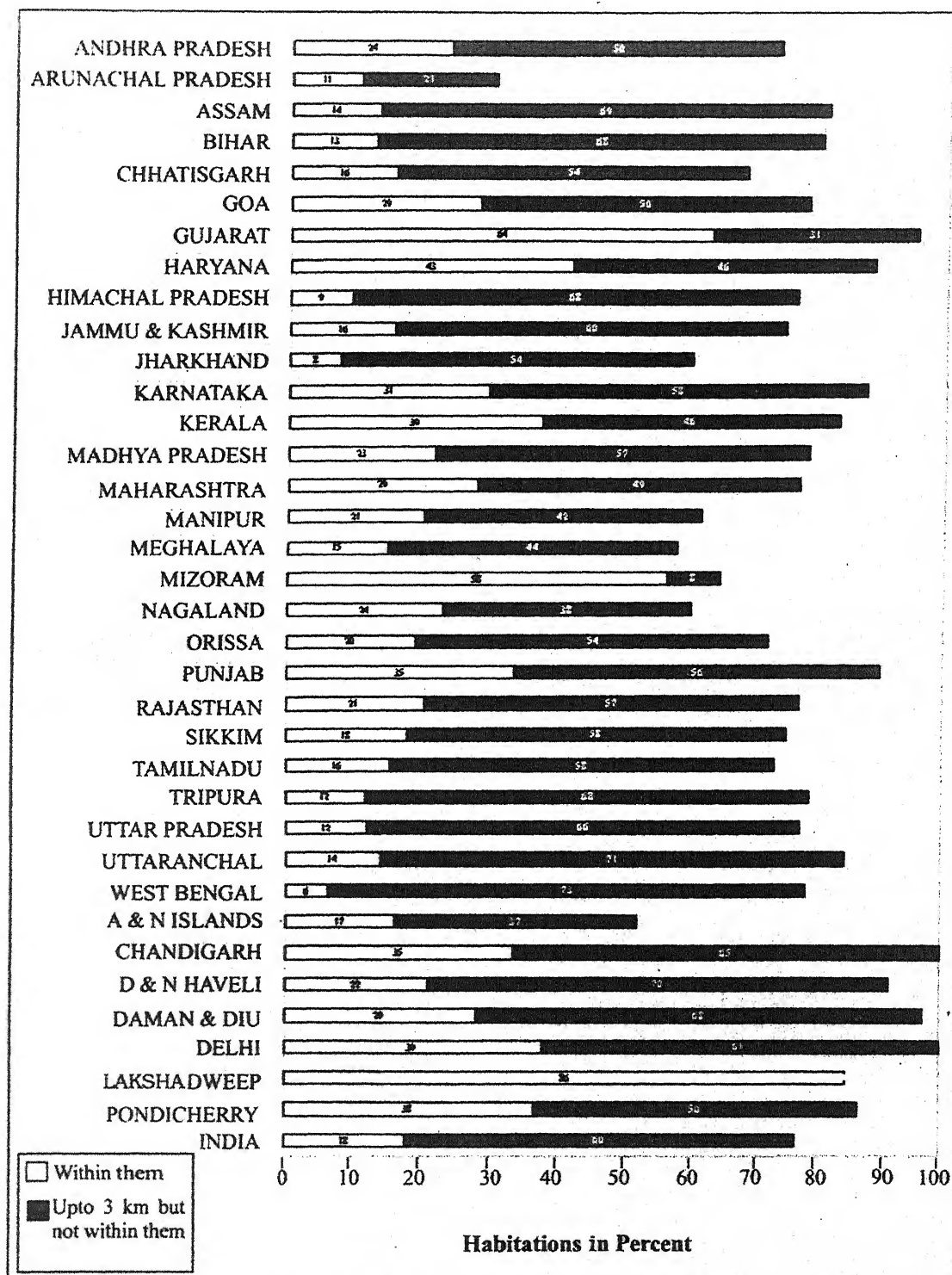Figure 3: State-wise Rural Habitations having Primary Stage Schooling Facility, 2002

State	Within them	Upto 1 km but not within them
ANDHRA PRADESH	78	15
ARUNACHAL PRADESH	40	12
ASSAM	45	40
BIHAR	57	32
CHHATTISGARH	63	28
GOA	79	12
GUJARAT	78	16
HARYANA	78	14
HIMACHAL PRADESH	29	46
JAMMU & KASHMIR	51	28
JHARKHAND	38	39
KARNATAKA	67	21
KERALA	61	19
MADHYA PRADESH	69	20
MAHARASHTRA	68	24
MANIPUR	61	18
MEGHALAYA	69	16
MIZORAM	89	1
NAGALAND	88	7
ORISSA	52	31
PUNJAB	79	14
RAJASTHAN	55	26
SIKKIM	55	25
TAMIL NADU	54	35
TRIPURA	38	38
UTTAR PRADESH	41	47
UTTARANCHAL	44	40
WEST BENGAL	35	57
A. & N. ISLANDS	42	22
CHANDIGARH	52	35
D. & N. HAVELI	42	43
DAMAN & DIU	40	46
DELHI	60	40
LAKSHADWEEP	100	
PONDICHERRY	87	5
INDIA	53	34

Legend:
- Within them
- Upto 1 km but not within them

Habitations in Percent

Figure 4
State-wise Rural Habitations having Upper Primary Stage Schooling Facility, 2002

Legend:
- ☐ Within them
- ■ Upto 3 km but not within them

Habitations in Percent

Figure 5
Rural Habitations having Primary Stage Schooling Facility within One km, 2002

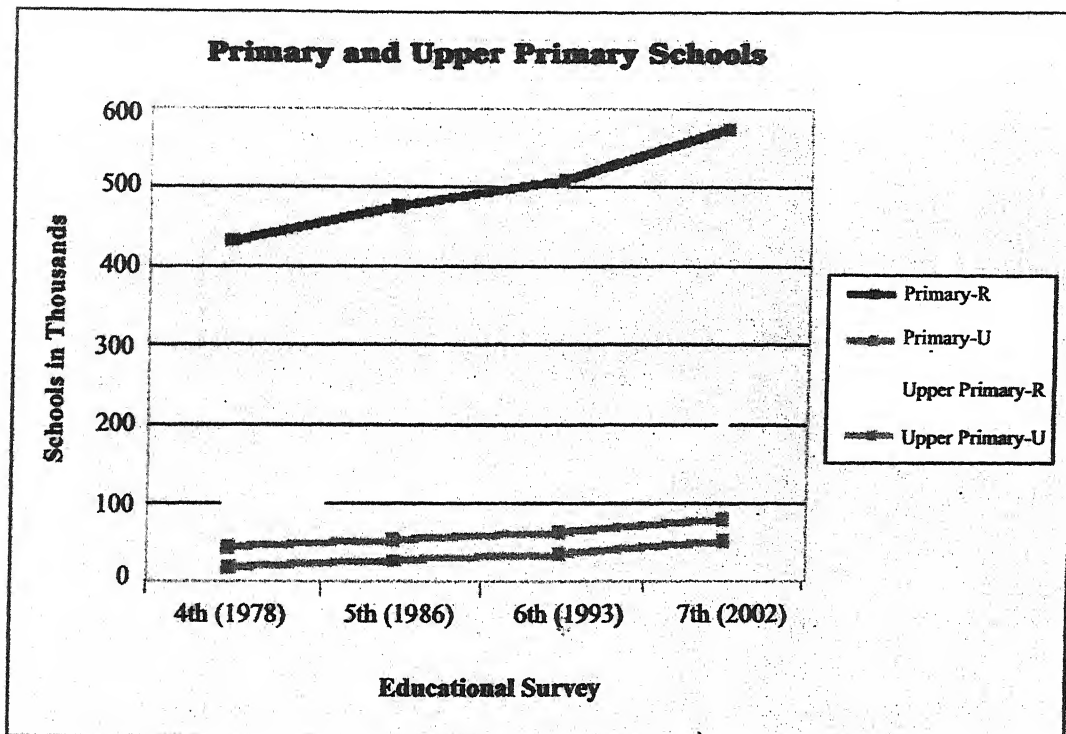Habitations in Percent

☐	51 to 80
☐	81 to 85
☐	86 to 90
▨	91 to 95
■	96 to 100
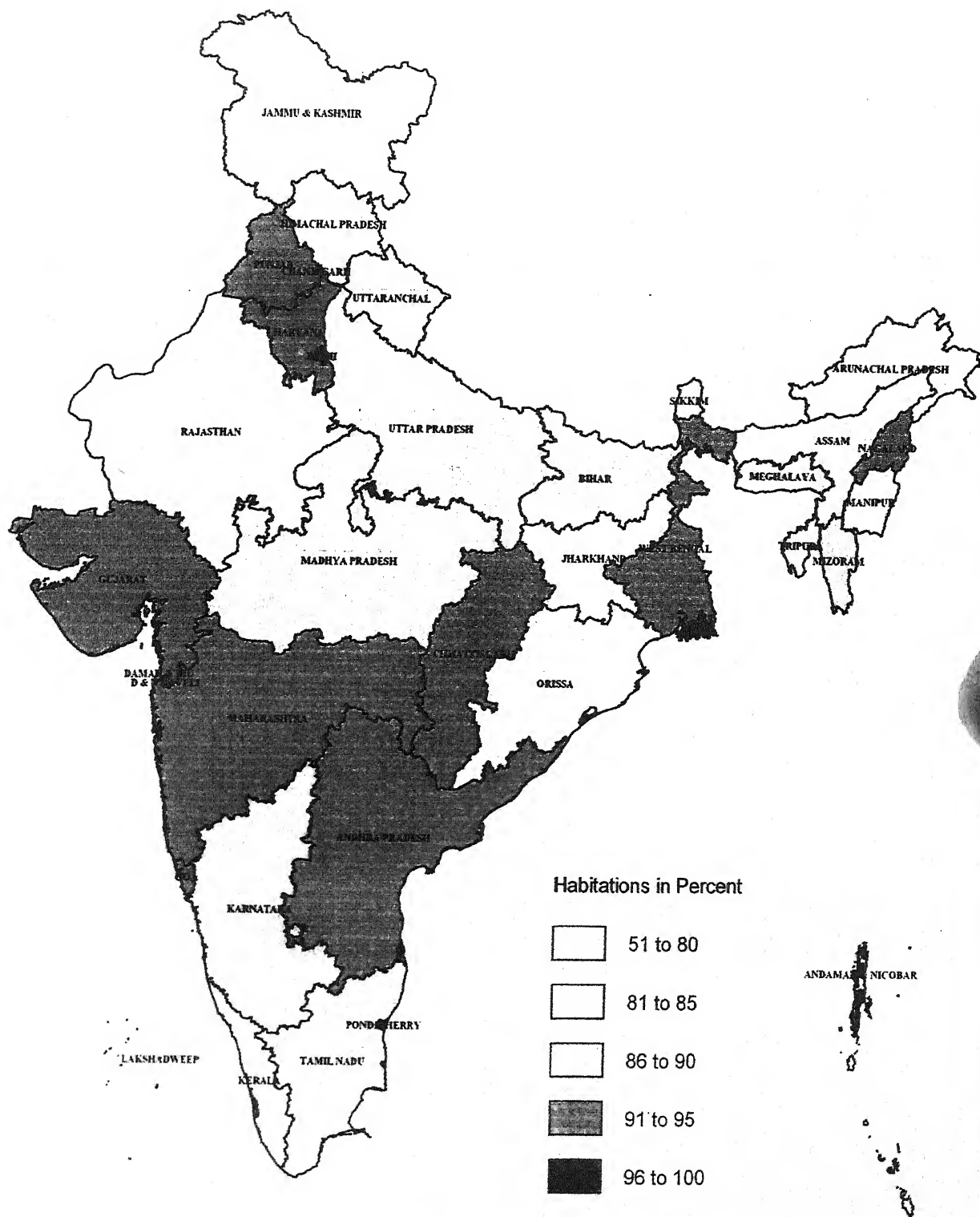
Figure 6
Rural Habitations having Upper Primary Stage Schooling Facility within Three km, 2002

Habitations in Percent

☐ 31 to 50

☐ 51 to 70

☐ 71 to 80

▦ 81 to 90

■ 91 to 100
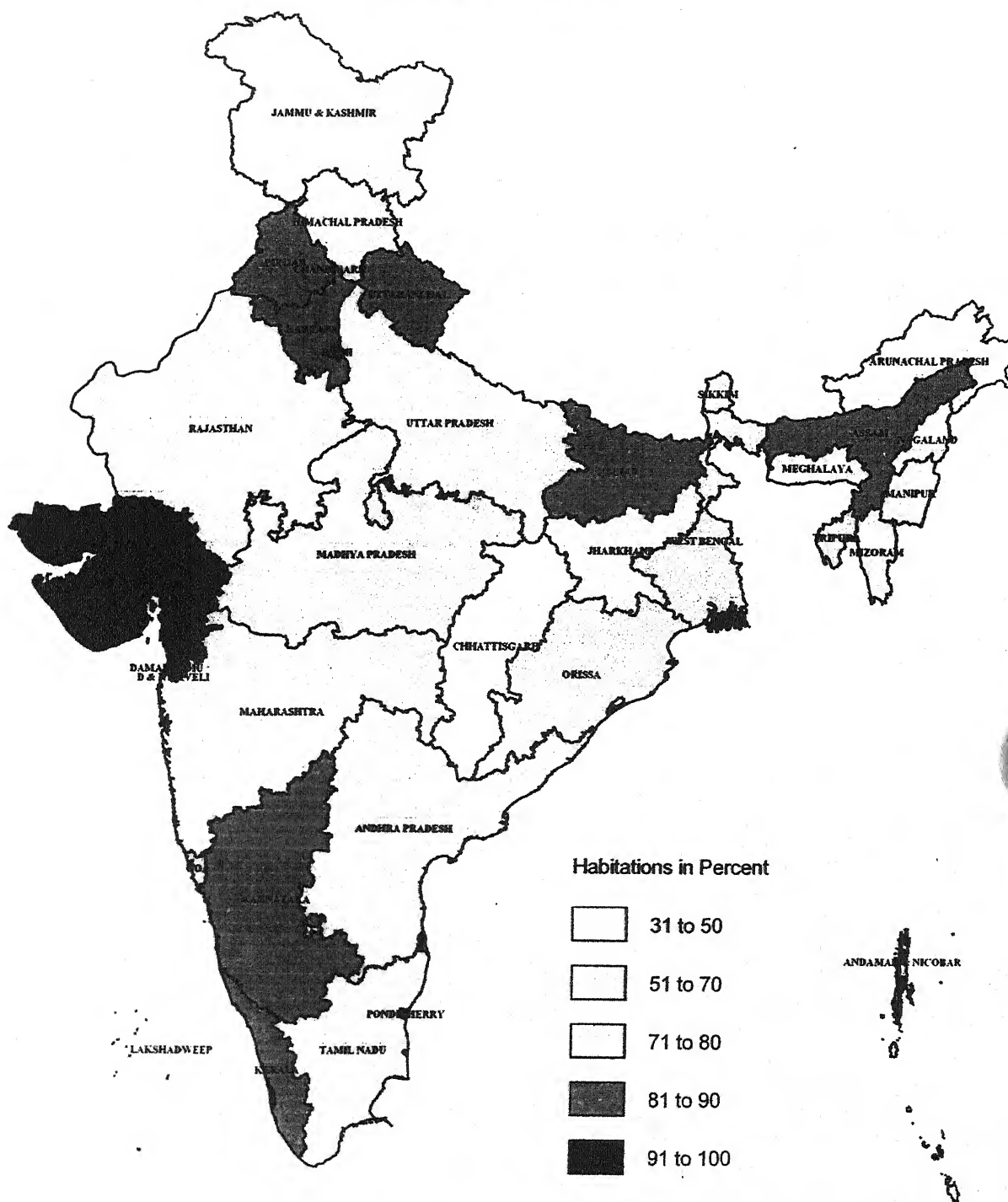
Figure 7
Growth in Recognised Schools
(4th to 7th Survey)
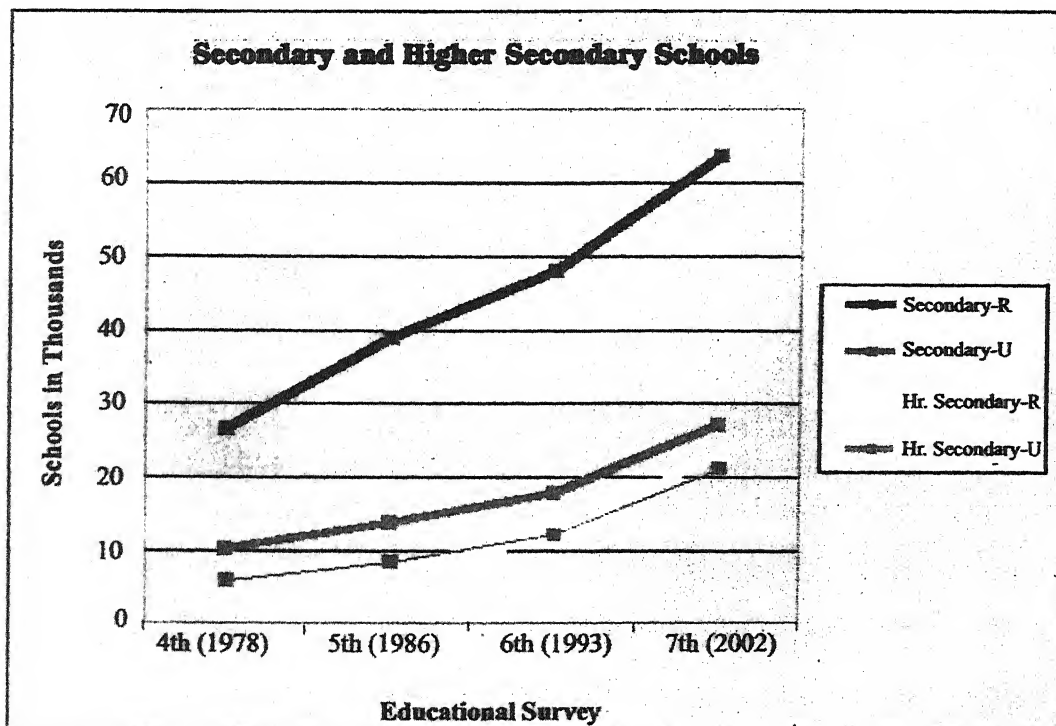
R – Rural and U – Urban

Figure 8
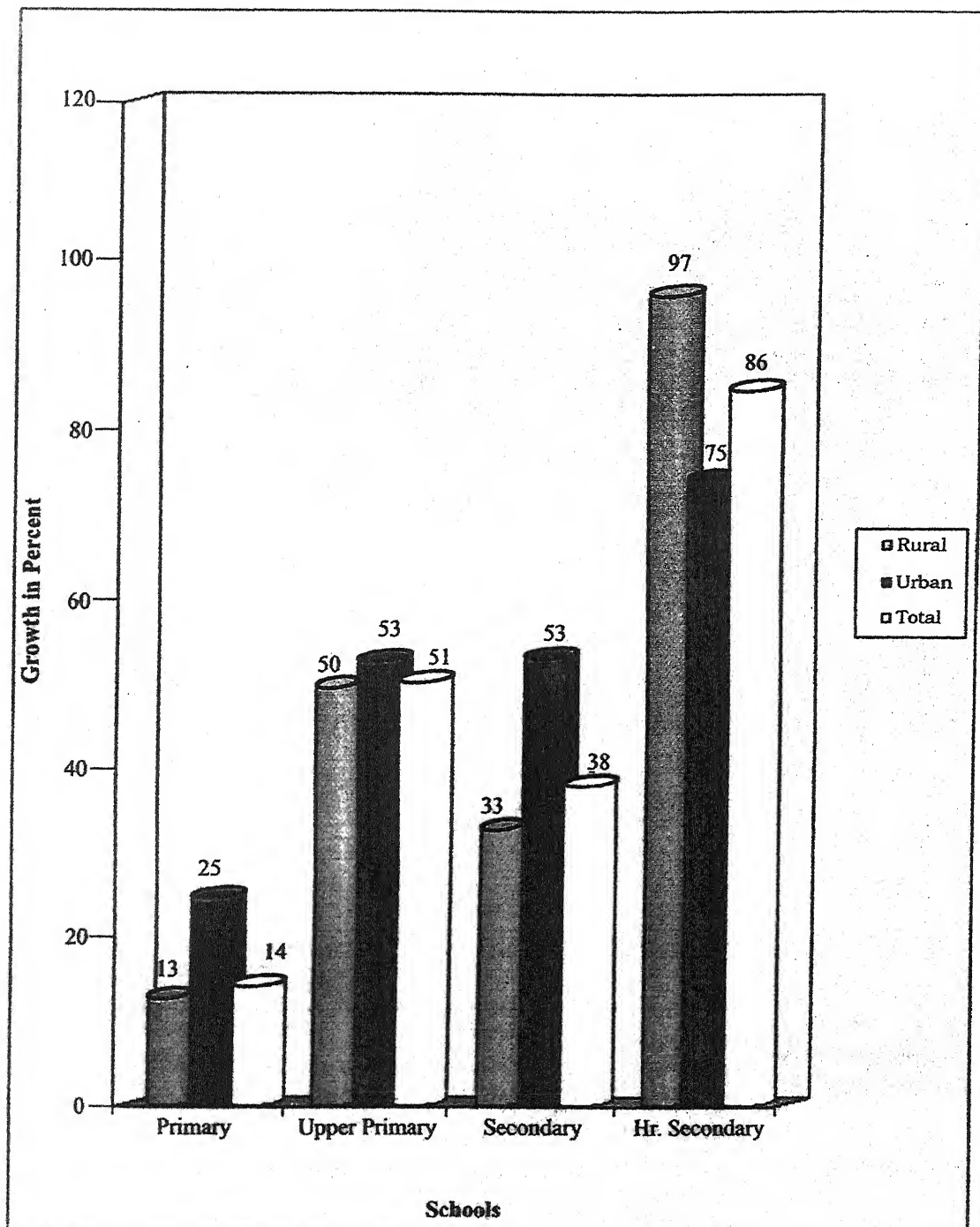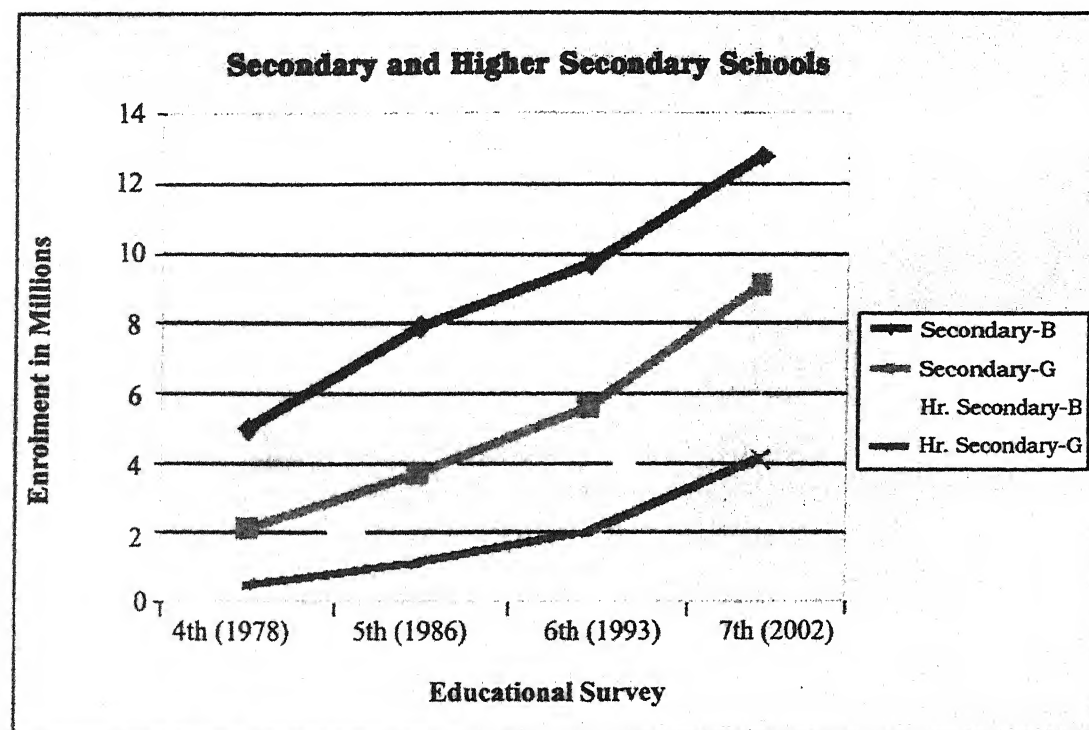Growth in Recognised Schools in Rural and Urban Areas
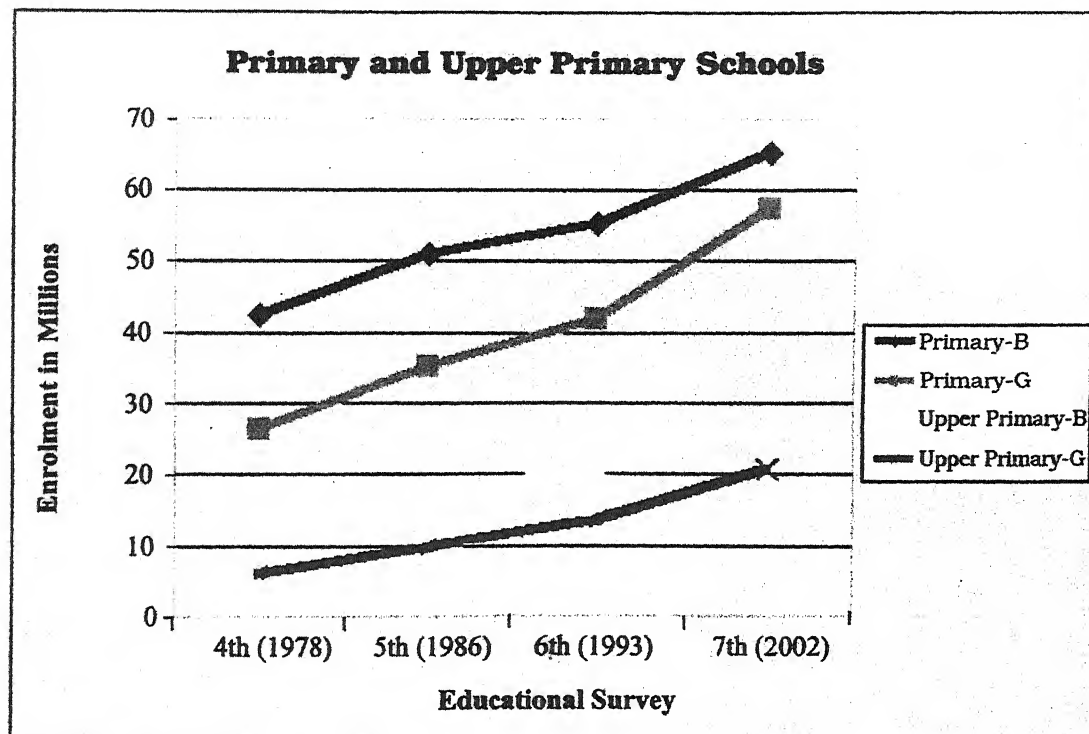(1993 to 2002)

Figure 9
Growth in Enrolment at Different School Stages
(4th to 7th Survey)

Primary and Upper Primary Schools

Legend:
- Primary-B
- Primary-G
- Upper Primary-B
- Upper Primary-G

Y-axis: Enrolment in Millions
X-axis: Educational Survey — 4th (1978), 5th (1986), 6th (1993), 7th (2002)

Secondary and Higher Secondary Schools

Legend:
- Secondary-B
- Secondary-G
- Hr. Secondary-B
- Hr. Secondary-G

Y-axis: Enrolment in Millions
X-axis: Educational Survey — 4th (1978), 5th (1986), 6th (1993), 7th (2002)

B – Boys and G - Girls

Figure 10
Growth in Enrolment in Rural and Urban Areas
(1993 to 2002)

Girls Enrolment

Growth in Percent (y-axis: 0, 20, 40, 60, 80, 100, 120, 140, 160, 180)

Rural / Urban / Total

- Primary: 42, 22, 37
- Upper Primary: 66, 33, 52
- Secondary: 80, 47, 63
- Hr. Secondary: 157, 85, 107

School Stage

Total Enrolment

Growth in Percent (y-axis: 0, 20, 40, 60, 80, 100, 120)

Rural / Urban / Total

- Primary: 28, 21, 26
- Upper Primary: 42, 29, 37
- Secondary: 49, 36, 43
- Hr. Secondary: 98, 67, 79

School Stage
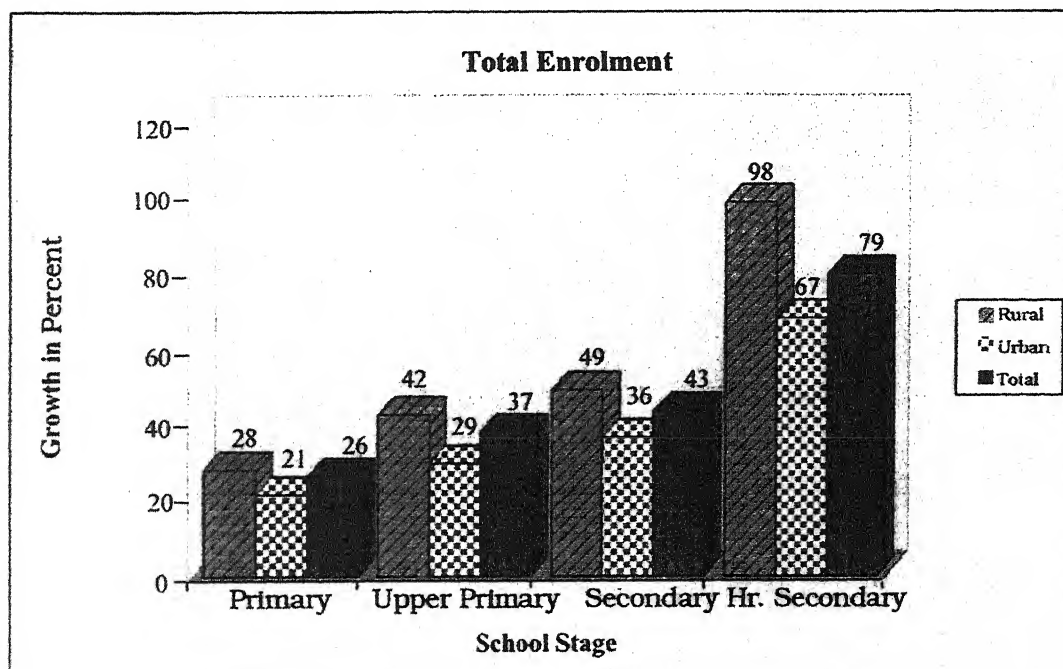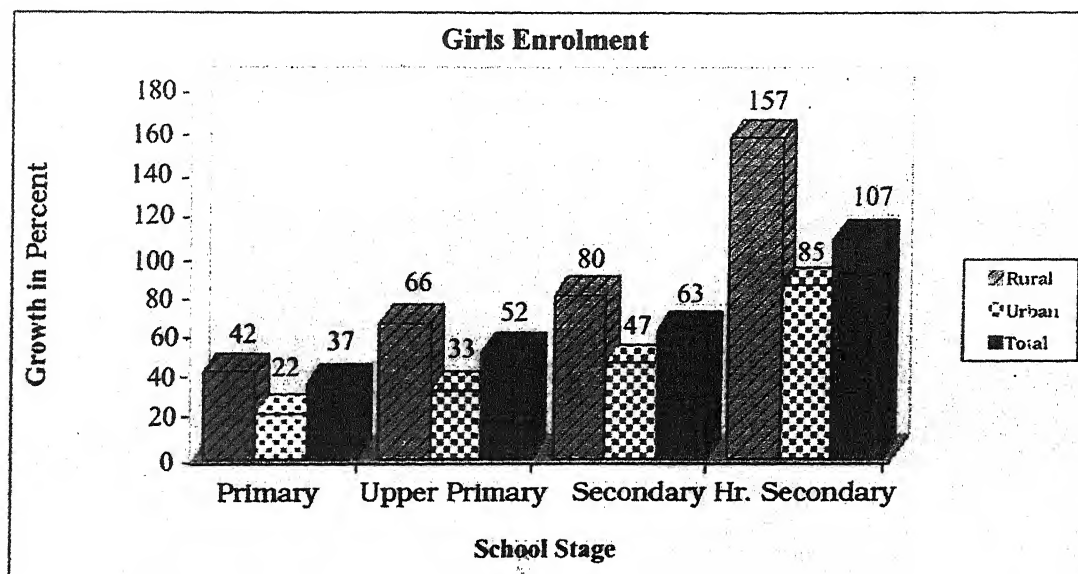
Figure 11
Percentage of Girls Enrolment in Rural and Urban Areas, 2002
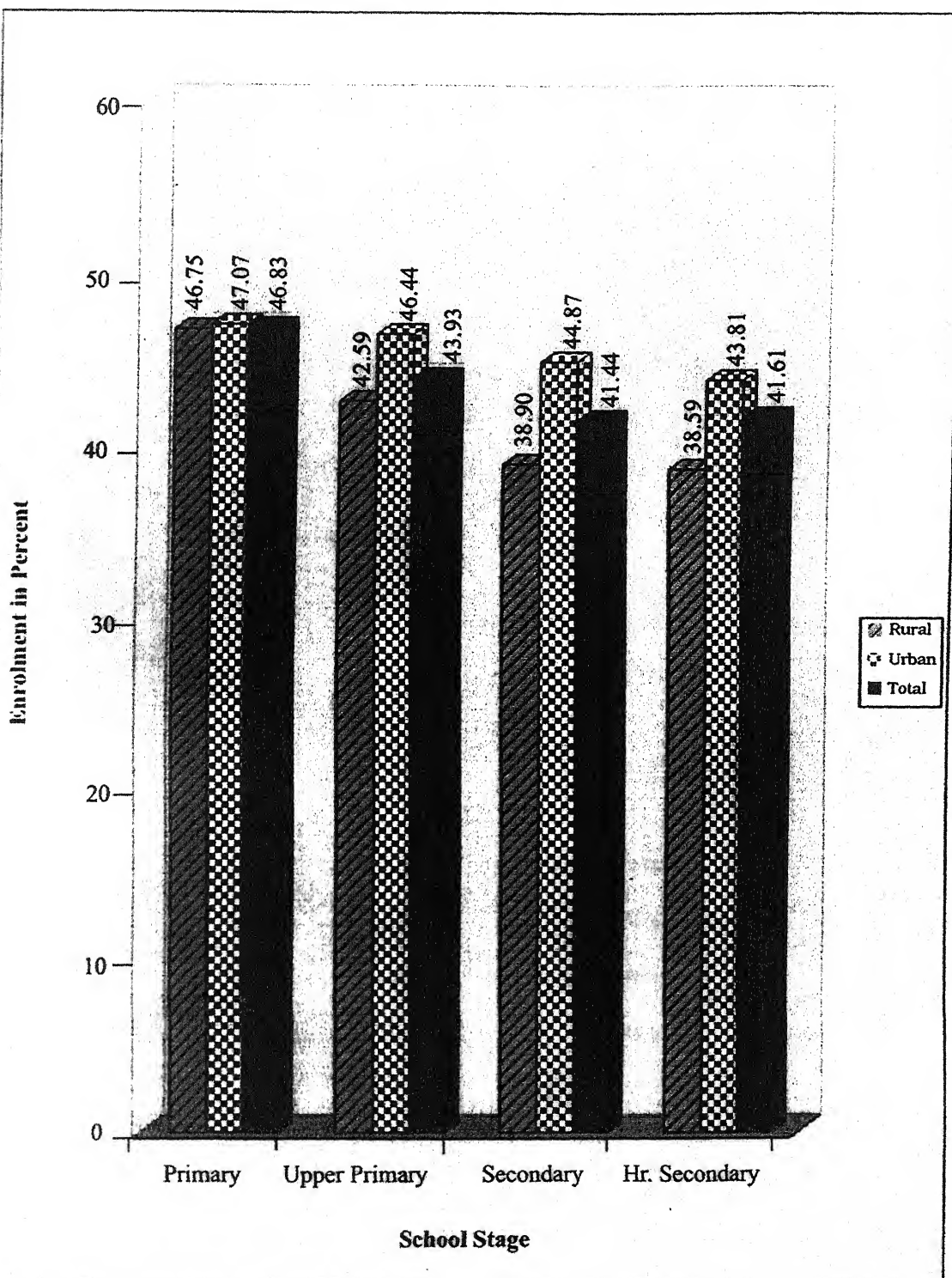
Figure 12
Girls Enrolment at Primary Stage, 2002

Girls in Percent
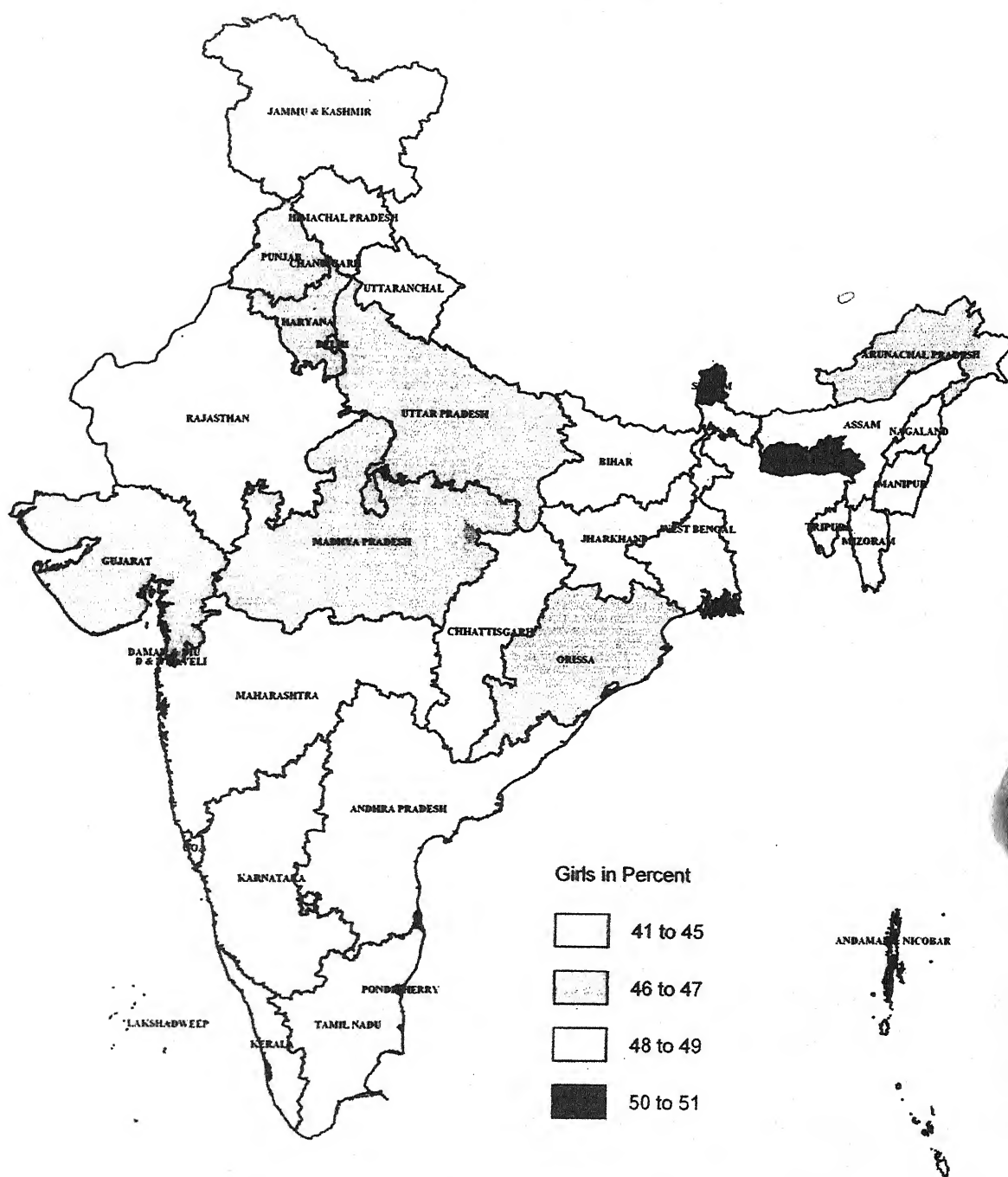
	41 to 45
	46 to 47
	48 to 49
	50 to 51

Figure 13
Girls Enrolment at Upper Primary Stage, 2002

Girls in Percent

☐	31 to 40
☐	41 to 45
☐	46 to 50
■	51 to 55
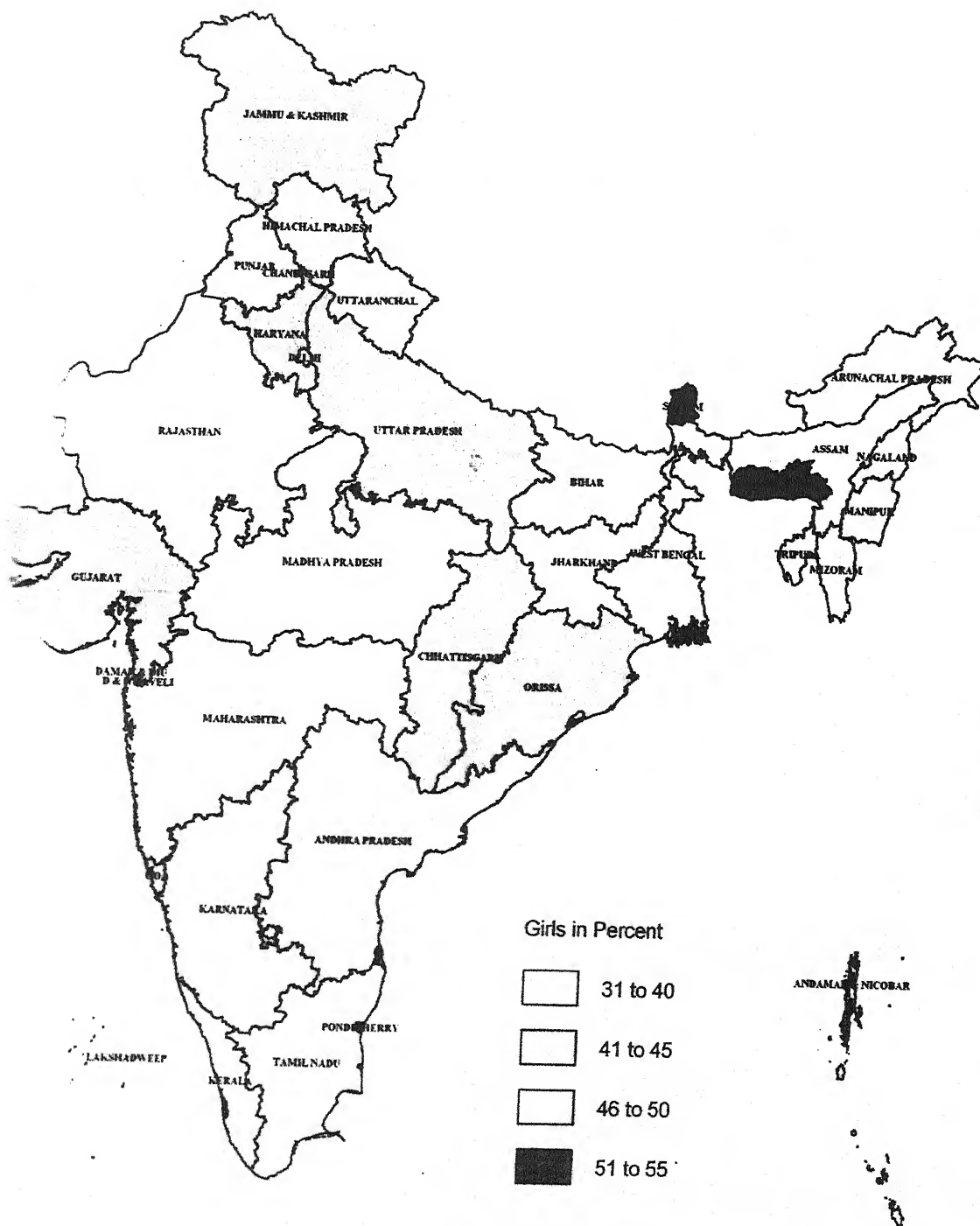
Figure 14
Girls Enrolment at Secondary Stage, 2002

Girls in Percent

☐	26 to 40
▨	41 to 45
☐	46 to 50
■	51 to 55
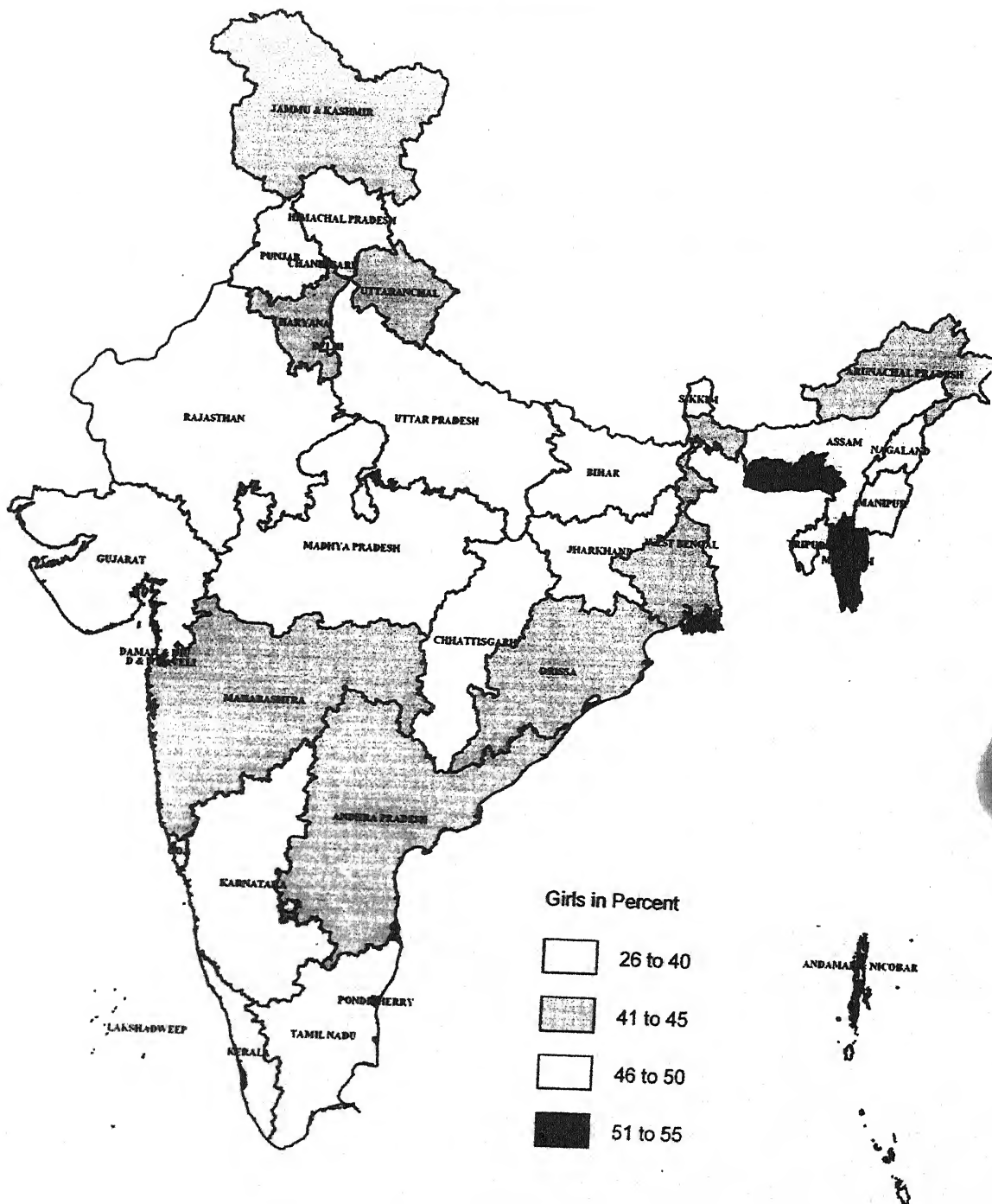
Figure 15
Girls Enrolment at Higher Secondary Stage, 2002

Girls in Percent

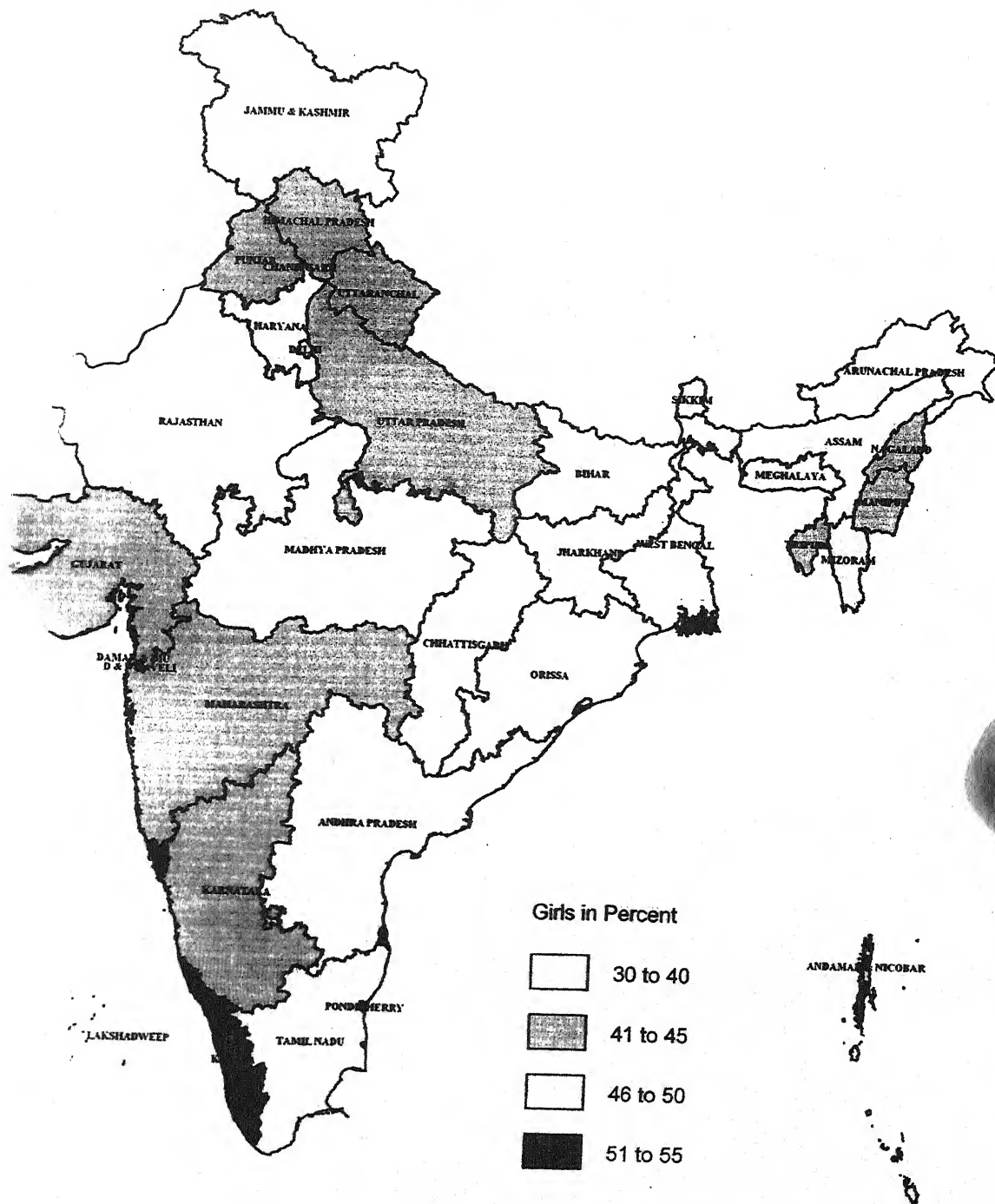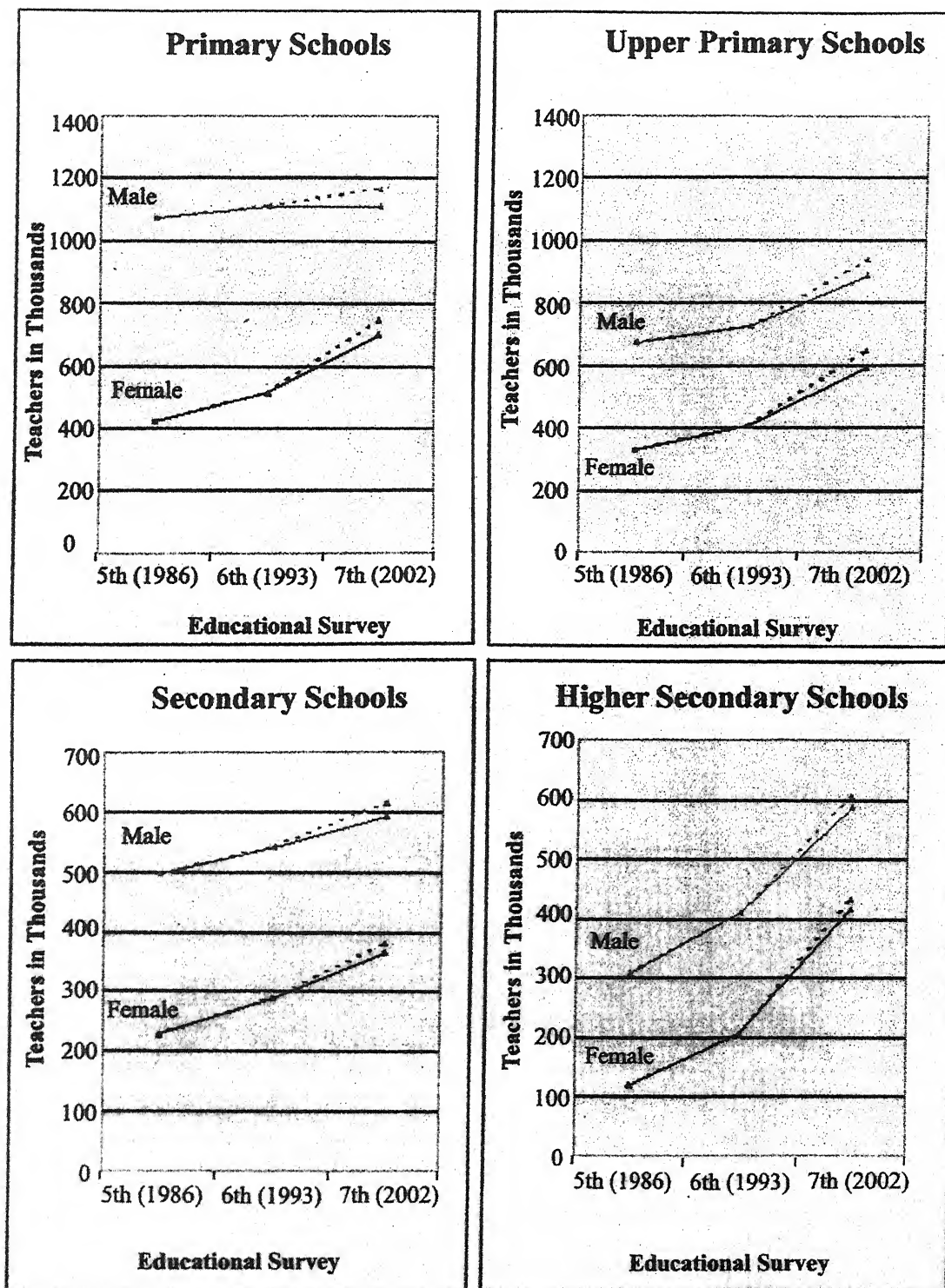|	
	30 to 40
	41 to 45
	46 to 50
	51 to 55

Figure 16
Teachers in Schools
(5th to 7th Survey)

-------- Including Para-teachers. _____ Excluding Para-teachers.

Figure 17
Growth in Teachers in Rural and Urban Schools
(1993 to 2002)